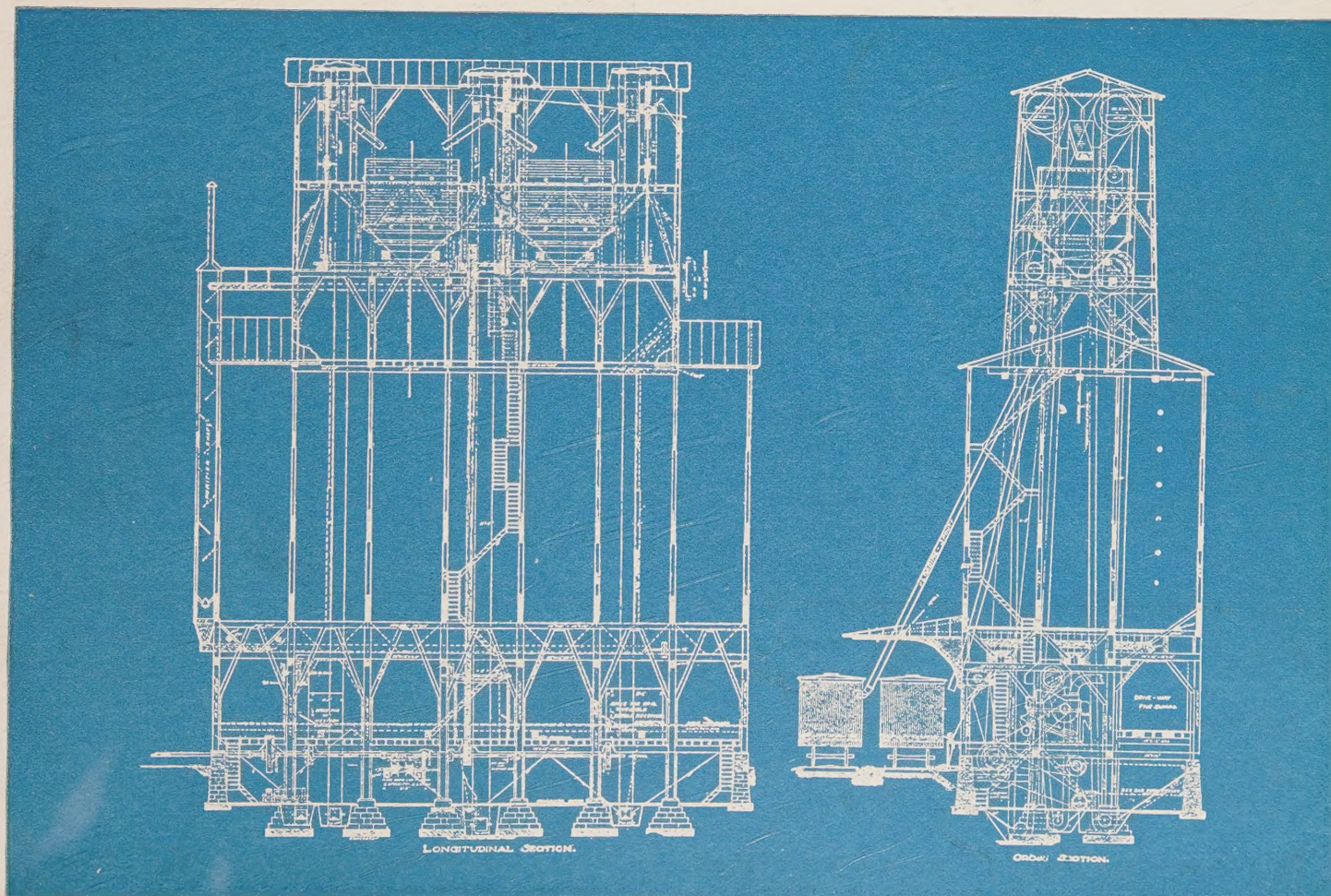


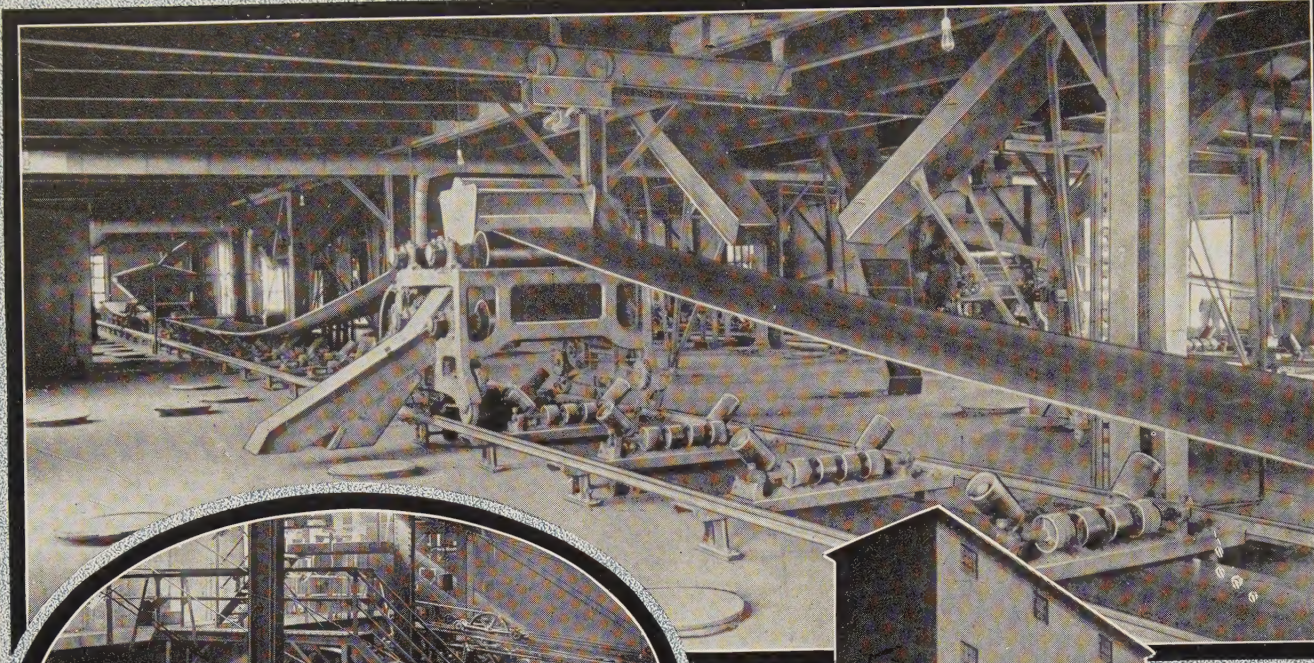
The Difference

between the dark, dirty, slow handling elevator in vogue at the beginning of this century and still tolerated at many stations and the clean, thoroughly ventilated, well-equipped, rapid handling elevator of today is an attractive profit. Every progressive elevator builder would much rather erect a grain handling plant which will be a delight to the operator and a credit to the designer ten years hence than a wasteful, old style trap which is now a disgrace to all concerned. Specialists in any line are the only experts whose practical advice is worth heeding.

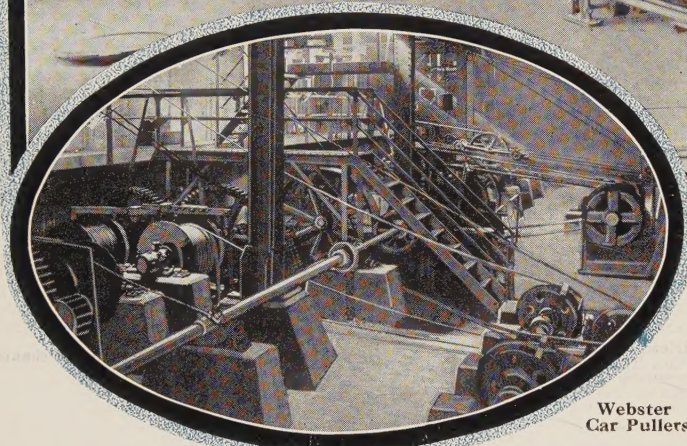
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Sectional Views of 100,000 bushel Receiving and Transfer Elevator.



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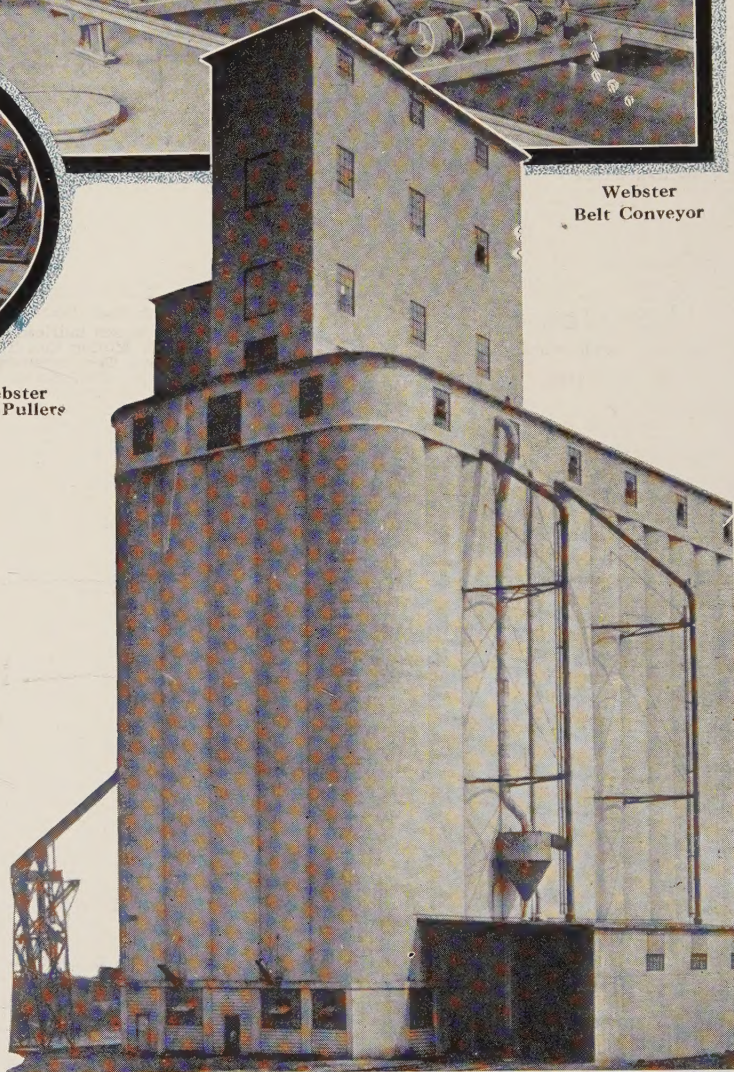


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Standard Equipment in Modern Grain Handling Plants

WEBSTER grain handling equipment is invariably specified by successful builders of Grain Elevators. They know when they recommend Webster equipment that it will live up to the high standard which they demand.

The experience of numerous installations in grain elevators and mills is concentrated in the Webster Organization. Let them select suitable equipment to meet your particular requirements.



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Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them.

AMARILLO, TEXAS.

Early Grain & Elvtr. Co., wholesale grain.*
Stone & Co., Lester, wholesale grain.*

ATCHISON, KANS.

Moore-Lawless Grain Co., consgts., futures, pvt. wires.*

ATLANTA, GA.

Commercial Exchange Members.

Haym & Sims, successors to
Georg & Son, J., wholesale brokers, grain, hay.*

BALTIMORE, MD.

Chamber of Commerce Members.

Baltimore Grain Co., grain receivers, exporters.*
Dennis & Co., grain merchants.
England & Co., Inc., Chas., grain, hay.*
Fahey & Co., John T., grain receivers and exporters.*
Gill & Fisher, receivers and shippers.*
Hammond, Snyder & Co., Inc., receivers, exporters.*
Hax & Co., G. A., grain, hay, seeds.*
Jones & Co., H. C., receivers, shippers, exporters.*
Lederer Bros., grain receivers.*
Robinson & Jackson, grain commission merchants.*
Steen & Bro., E., grain receivers and exporters.*

BEAVER, OKLA.

Horne Grain Co., Texas wheat, barley, milo.

BLOOMINGTON, ILL.

Hasenwinkle Grain Co., brokers of country grain.

BOSTON, MASS.

Chamber of Commerce Members.

Benzaquin, Matthew D., grain brokerage commission.*

BUFFALO, N. Y.

Corn Exchange Members.

Armour Grain Co., grain merchants.*
Burns Grain Co., grain commission.*
Butchill Grain & Seed Co., receivers, shippers.*
Davis, Inc., A. C., grain.*
Doorty-Ellsworth Co., Inc., brokerage commission.*
Electric Grain Elevator Co., consignments.*
Globe Grain Co., receivers & shippers.*
Harold, A. W., grain, barley a specialty.*
Lewis Grain Corp., receivers & shippers.*
McConnell Grain Corporation, commission merchants.*
McKilien, Inc., J. G., receivers and shippers.*
Pratt & Co., receivers, shippers of grain.*
Ratcliffe, S. M., commission merchant.*
Seymour-Wood Grain Co., consignments.*
Sunset Grain & Feed Co., grain & feed.*
Taylor & Bournique Co., grain merchants.*
Traders & Producers Supply Co., millfeeds a specialty.*
Townsend Ward Co., The, consignments.*
Watkins Grain Co., consignments.*
Whitney & Gibson, consignments.*

CAIRO, ILL.

Board of Trade Members.

Cairo Grain Commission Co., consignments.*
Halliday Elevator Co., grain dealers.*
Lynch Grain Co., grain dealers.*
Thistlewood & Co., grain and hay.*

CARROLLTON, MO.

Claiborne Commission Co., commission merchants.*

CEDAR RAPIDS, IOWA.

Cedar Rapids Grain Co., corn and oats.*
Gifford Grain Co., grain and grain products.*
Kine Wilder Grain Co., grain shippers.*
Murrel Grain Co., Ray, revrs. and shprs.*

CHATTANOOGA, TENN.

Board of Trade Members.

Hood Feed Co., flour, feeds, field seeds.

CHICAGO, ILL.

Board of Trade Members.

Anderson & Co., W. P., grain commission merchants.*
Armour Grain Co., grain buyers.*
Bailey & Co., E. W., grain commission merchants.*
Bartlett-Frazier Co., grain merchants.*
Brennan & Co., John E., grain commission merchants.*
Carhart Code Harwood Co., grain commission.*
Dole & Co., J. H., grain and seeds.*

CHICAGO, ILL., (Continued).

Freeman & Co., Henry H., grain, hay, straw.
Gerstenberg & Co., commission merchants.*
Harris, Winthrop & Co., grain commission.*
Hitch & Carder, commission merchants.*
Holt & Co., Lowell, commission, grain and seeds.
Lamson Bros. & Co., consignments solicited.*
Leland & Co., E. F., grain and seeds.*
McKenna & Dickey, commission merchants.*
Mumford & Co., W. R., grain, hay, millstuffs.*
Norris Grain Co., grain merchants.*
Paynter, H. M., grain and field seeds.
Pope & Eckhardt Co., grain and seeds.*
Press & Co., W. G., grain, provisions, stocks, etc.
Requa Bros., wheat a specialty.*
Rumsey & Co., grain commission.*
Sawers Grain Co., consignments.*
Schiffman & Co., P. H., commission.*
Shaffer Grain Co., J. C., grain merchants.*
Somers, Jones & Co., grain and field seeds.*
Uplike Grain Co., consignments.*

CINCINNATI, O.

Grain & Hay Exchange Members.

Early & Daniel Co., grain, hay, feed.*
Gale Grain Co., The A. C., receivers & shippers.*

CLEVELAND, O.

Grain & Hay Exchange Members.

Bailey, E. L., grain and millfeed.*
Cleveland Grain & Milling Co., The, revrs. & shprs.*
Gates Elevator Co., The, receivers and shippers.*
Sheets Elevator Co., The, grain, hay, straw.*
Shepard, Clark & Co., grain merchants.*
Strauss & Co., H. M., receivers, shippers hay & grain.*

COLBY, KANSAS.

Harris & Haynes, wholesale—brokers—grain.

CLOVIS, N. MEX.

Western Elvtr. Co., The, revrs.-shprs.-ldqtrs kafir-milo.*

DAVENPORT, IOWA.

Davenport Elevator Co., receivers and shippers.*

DALHART, TEXAS.

Kinard Grain Co., J. C., wholesale grain & hay.*

DECATUR, ALA.

Lyle-Taylor Grain Co., whlse. grain, hay, feeds.

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*

DENVER, COLO.

Grain Exchange Members.

Ady & Crowe Merc. Co., The, grain and hay.*
Ashcraft Grain Co., S. B., wholesale grain.*
Conley-Ross Grain Co., The, grain and beans.*
Crescent Flour Mills Co., The, merchant millers.*
Denver Elevator, wholesale grain, flour, millfeed.*
Farmers Elevator Co., The, H. F. Rover, Mgr.
Gallagher Grain Co., grain merchants.*
Houston Grain Co., wholesale grain.*
Kellogg Grain Co., O. M., receivers and shippers.*
McCaull-Dinsmore Co., wholesaler and commission.*
Moore-Lawless Grain Co., private wires to all markets.*
Phelps Grain Co., T. D., wholesale grain.*
Rocky Mountain Grain Co., export and domestic grain.*
Summit Grain Co., wheat, corn, oats, rye, barley.*

DES MOINES, IOWA.

Board of Trade Members.

Des Moines Elvtr. & Gr. Co., oats a specialty.
Iowa Corn Products Co., receivers and shippers.*
Marshall Hall Grain Co., grain commission.*
Taylor & Patton Co., corn and oats.*

DETROIT, MICH.

Board of Trade Members.

Dumont, Roberts & Co., receivers, shippers.*
Huston, C. R., grain and hay.*
Lapham & Co., J. S., receivers & shippers.*
Lichterberg & Son, oats, corn, hay, straw.*
Simmons & Co., F. J., grain and hay.*
Swift Grain Co., consign or ask for bid.*

FORT WORTH, TEX.

Grain and Cotton Exchange Members.

Dorsey Grain Co., merchants—commission, consignments.
Transit Grain & Com. Co., consignments, brokerage.*

GREAT FALLS, MONTANA.

Barkmeyer Grain & Seed Co., grain dealers.*

GREENVILLE, O.

Grubbs Grain Co., E. A., track buyers.*

HAMBURG, IOWA.

Sullivan & McBride S. & G. Co., red cob fodder corn.*

HASTINGS, NEBR.

Koehler-Twidale Elevator Co., grain dealers.*

HATTIESBURG, MISS.

Merchants Grocery Co., whlse. grocers, grain, fd., dr.

HOUSTON, TEX.

Gulf Grain Co., grain, hay, millfeed.*
Rothschild Co., S., grain, c/s products, rice b/p.*

HUTCHINSON, KANS.

Board of Trade Members.

Central Grain Co., The, buyers for mills.
Farmers Co-op. Com. Co., commission merchants.
Goffe & Carkner, private wire.*
Hayes Grain Co., John, grain merchants.
Hutchinson Grain Co., grain merchants.*
McClure Grain Co., J. B., buyers and sellers.*
Midwest Grain Co., The, shippers.*
Producers Grain Co., The, milling wheat.*
Southwest Grain Co., receivers and shippers.*
Union Grain Co., grain merchants.*
Vanderslice-Lynds Co., grain commission merchants.*

INDIANAPOLIS, IND.

Board of Trade Members.

Anderson & Mercer, grain commission & consignments.*
Boyd Grain Co., Bert A., strictly brokerage & com.*
Cleveland Grain & Milling Co., grain commission.
Hayward-Rich Grain Co., grain commission.*
Hill Grain Co., The Low, grain merchants.*
Steinhart Grain Co., commission and brokerage.*
Witt, Frank A., grain commission and brokerage.*

JACKSON, MICH.

Bartlett & Co., J. E., salvage grain buyers & sellers.
Wagner-White Co., track buyers-sellers, grain-feed.

JACKSON, MISS.

Royal Feed & Mlg. Co., mixed feed mfrs.

KANSAS CITY, MO.

Board of Trade Members.

Christopher & Co., B. C., kafir, feterita, milo.*
Claiborne Commission Co., commission merchants.*
Croysdale Grain Co., commission merchants.*
Davis Grain Co., A. C., grain commission.*
Denton Kuhn Grain Co., consignments.*
Ernst Davis Grain Co., commissions.*
Federal Grain Co., receivers, shippers.*
Frisco Elevators Co., grain merchants.*
Goffe & Carkner, grain commission.*
Hall-Baker Grain Co., consignments.*
Lichtig & Co., H., kafir, milo, screenings.*
Logan Bros. Grain Co., receivers and shippers.*
McCoy-Thomas Grain Co., consignments-futures.*
Miller Grain Co., S. H., consignments.*
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., grain receivers.*
Norris Grain Co., grain merchants and exporters.*
Roehen Grain Co., E. E., consignments.*
Root Grain Co., consignments and futures.*
Sconlar Bishop Grain Co., receivers and shippers.*
Shannon Grain Co., consignments.*
Simonds, Shields, Lonsdale Grain Co., grain.*
Smith-Weekes Bkg. Co., grain broker.*
Thresher Grain Co., R. J., grain commission.*
Wilser Grain Co., consignments.*

LAWRENCE, KANS.

Underwood & Sons, J., grain, feed, seeds.

LIBERAL, KANS.

Vickers Grain & Seed Co., grain and field seeds.

LINCOLN, NEBR.

Grain Exchange Members.

Lincoln Grain Co., grain merchants.*

LITTLE ROCK, ARK.

Grain Exchange Members.

Caple & Stockton, hav. grain, feed.
Farmer Co., E. L., brokers, hay, grain, mill feed.*
Gordy Co., C. L., grain brok., hay, grain, mill feed.*

(Continued on next page.)

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Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

LOUISVILLE, KY.

Board of Trade Members.

Bingham-Hewett Gr. Co., receivers-shippers of grain.*
Callahan & Sons, receivers and shippers of grain.*
Fruechtenicht, Henry, grain, feed, hay.*
Kentucky Public Elevator Co., storers and shippers.*
Verhoeff & Co., H., receivers and shippers.*
Zorn & Co., S., receivers and shippers.*

LYNCHBURG, VA.

Moon-Taylor Co. grain and hay brokers.

M'KINNEY, TEXAS.

Reinhart & Company, wheat, corn, oats, maize.*

MARSHALL, MO.

Claiborne Commission Co., commission merchants.*

MEMPHIS, TENN.

Merchants Exchange Members.

Davis & Andrews Co., grain, mixed feed.*

MILWAUKEE, WIS.

Chamber of Commerce Members.

Bacon Co., E. P., grain and seed.*
Bell Co., W. M., commission merchants.*
Blanchard Grain Co., "Always Dependable."*
Bush Grain Co., grain merchants.*
Cargill Grain Co., grain and seeds.*
Donahue-Stratton Co., dlsr. grain and feed.*
Flanley Grain Co., consignments solicited.*
Franke Grain Co., feeds, grain, hay.*
Fraser-Smith Co., commission merchants.*
Froedtert Gr. & Maltng Co., grain commission.*
Kamm Co., P. O., grain shippers.*
Lamson Bros. & Co., grain commission.*
Milwaukee Grain Commission Co., grain commission.*
Rang & Co., Henry, commission merchants.*
Runkel & Dadman, grain commission merchants.*
Taylor & Bournique Co., grain merchants.*
Udike Grain Co., consignments solicited.*

MERIDIAN, MISS.

Board of Trade Members.

Lyon & Co., A. J. whole. gro., grain, feed.
Threefoot Bros. & Co., whole. grain, feed, flr., gro.*

MIDDLEPOINT, OHIO.

Pollock Grain Co., grain, hay, straw, ear corn.

MIDDLETOWN, CONN.

Meech & Stoddard, Inc., grain, feed, hay, flour.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members.

Cargill Commission Co., grain commission.*
Cereal Grading Co., grain merchants.*
Hankinson & Co., H. L., grain commission.*
Malmquist & Co., C. A., receivers & shippers.*
Marfield Grain Co., grain commission.*
McCavill Dinsmore Co., consignments solicited.*
Seidl, Frank J., all grains and feeds.*
Sheffield Elevator Co., shippers of grain.*
Sterling Grain Co., receivers and shippers, all grains.*
Van Dusen-Harrington Co., grain merchants.*

MOULTRIE, GA.

Delay, A. J., flour and grist mill.

NASHVILLE, TENN.

Grain Exchange Members.

Allen Grain Co., receivers and shippers.*
Allfeed Milling Co., feed manufacturers.*
Kerr, S. S., receiver and shipper.*
Tennessee Grain Co., receivers and shippers.*
Tyner & Co., John A., receivers and shippers.*

NEW CASTLE, PA.

Hamilton Co., grain, feed, flour, hay, potatoes.

NEW ORLEANS, LA.

Board of Trade Members.

Anderson & Jackson, Inc., exporters of grain.*
Fox Co., G. B., exporters.*
Nathan, Edw., succr. to Nathan & Fettis, fwdg. agt.*

NEW YORK CITY.

Produce Exchange Members.

Jones & Co., M. B., buyers—quote us.*
Knight & Company, commission merchants.*
Therrien, A. F., broker.

NORFOLK, VA.

Moon-Taylor Co., grain and hay brokers.

OKLAHOMA CITY, OKLA.

Grain Exchange Members.

Cherokee Grain Co., grain merchants.*
Conyers Grain Co., grain merchants.*
Lang Grain Co., J. H., prompt and efficient service.*
Langenberg Bros. Grain Co., grain merchants.*
Marshall Grain Co., grain, feed, seeds.*
Moore, George L., grain merchant.*
Okla. City M. & E. Co., grain merchants, millers.*
Perkins Grain Co., W. L., brokers.*

OKLAHOMA CITY, OKLA., (Continued).

Scannell-Winters Grain Co., grain and feed.*
Stinnett Grain Co., grain merchants.*
Stowers Grain Co., W. B., commission merchants.*
Strader Alexander Co., grain, hay, feed.*
White Grain Co.*

OMAHA, NEBR.

Grain Exchange Members.

Butler Welsh Grain Co., grain merchants.*
Crowell Elevator Co., receivers, shippers.*
Holmquist Elevator Co., receivers and shippers.*
Maney Grain Co., The, consignments.*
Roberts Grain Co., Geo. A., grain merchants.*
Stockham Grain Co., E., commission merchants.*
Trans-Mississippi Grain Co., receivers and shippers.*
United Grain Co., grain commission.*
Udike Grain Co., consignments.*

OTTAWA, KANS.

Ross Milling Co., The, millers, hard wheat flour.

PAMPA, TEXAS.

McMurtry Grain Co., L. C., wheat, kafir, milo.*

PEORIA, ILL.

Board of Trade Members.

Bartlett Co., S. C., grain commission.*
Bowen Grain Co., H. D., receivers & shippers.*
Cole Grain Co., Geo. W., receivers and shippers.*
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.*
Harrison, Ward & Co., receivers & shippers.*
Lake Grain Co., grain commission.*
McFadden & Co., G. C., consignments.*
Miles, P. B. & Co., grain commission.*
Mueller Grain Co., receivers and shippers.*
Turner Hudnut Co., receivers and shippers.*
Tyng Grain Company, receivers and shippers.*

PHILADELPHIA, PA.

Commercial Exchange Members.

Delp Grain Co., E. E., grain and millfeeds.*
Dunwoody Co., Etl., flour, grain, feed.*
Miller & Sons, L. F., grain, seeds, hay.*
Richardson Bros., grain, flour, millfeeds.*
Richardson, Geo. M., grain and feeds.*
Rogers & Co., E. L., hay, straw, grain, feed.*
Stites, A. Judson, grain and millfeed.*

PITTSBURGH, PA.

Members Grain and Hay Exchange.

Allen & Co., H. S., grain and hay.*
Burson Grain Co., O. G., recvrs., shprs.-commission.*
Elwood & Co., R. D., hay and grain.*
Foster Co., C. A., grain merchants.*
Geldel & Leubin, grain and hay.*
Hardman & Daker, grain, hay, millfeed.*
Harper Grain Co., corn a specialty.*
Heck & Co., W. F., grain, hay, millfeed.*
McCague, Ltd., R. S., grain, hay.*
Rogers & Co., Geo. E., grain and hay.*
Smith & Co., J. W., grain merchants.*
Stewart & Co., Jesse C., grain and mill feed.*
Walton Co., Samuel, grain and hay.*

PONTIAC, ILL.

Balbach, Paul A., grain buyer, all markets.

PUEBLO, COLO.

McClelland Mct'l I. & R. Co., grain, hay and feed.*

RICHMOND, VA.

Grain Exchange Members.

Beveridge & Co., S. T., grain, hay, feeds, seeds.

ROCHESTER, N. Y.

Dalley Bros., Inc., receivers and shippers.*

SAGINAW, MICH.

Saginaw Milling Co., flour, feed, hay, grain.*

SALINA, KANS.

Board of Trade Members.

Bossemeyer Grain Co., The Paul, grain merchants.*
Freeman-Faith Grain Co., receivers and shippers.*
Hayes Grain Co., Always in the market.*
Richter Grain Co., wheat, coarse grains & millfeed.*
Rickel, E. L., grain receiver and shipper.*
Service Grain Co., grain, feed, grain products.*
Weber Flour Mills Corp., millers, exporters, grain dlsr.*

SALT LAKE CITY, UTAH.

Utah-Idaho Bkg. Co., whole. grain, hay, flour, feed.*

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Grain Exchange Members.

Button-Simmons Grain Co., grain commission.*
Claiborne Commission Co., commission merchants.*
Gordon Grain Co., grain commission.*
Marshall Hall Grain Co., consignments solicited.*
Washer Grain Co., W. S., consignments.*
Yancey Grain Co., commission merchants.*

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King, Douglas W., wheat, corn-brok., Texas R. Oats.*

ST. LOUIS, MO.

Merchants Exchange Members.

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Claiborne Commission Co., commission merchants.*
Dreyer Commission Co., feedstuffs, grain, seeds.*
Graham & Martin Grain Co., grain commission.*
Marshall Hall Grain Co., grain commissions.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Nanson Commission Co., grain commission.*
Picker & Beardsley Com. Co., grain and grass seed.*
Turner Grain Co., grain commission.*

SEDALIA, MO.

Claiborne Commission Co., commission merchants.*

SIOUX CITY, IOWA.

Board of Trade Members.

Button Co., L. C., grain commission.*
McCaull Dinsmore Co., commission.*
Terminal Grain Corp., receivers & shippers.*
Western Terminal Elevator Co., receivers and shippers.*

SIOUX FALLS, S. D.

Burke Grain Co., grain merchants.

SPRINGFIELD, MO.

Claiborne Commission Co., commission merchants.*

STERLING, COLO.

Moore, James A., grain dealer.

SUPERIOR, NEBR.

Bossemeyer Bros. Terminal Elevator.*
Elliott & Myers, grain merchants.*
Superior Terminal Elevtr. Co., grain, corn products.

THOMASVILLE, GA.

Burch & Son, W. H., corn millers.

TOLEDO, OHIO.

Produce Exchange Members.

De Vere & Co., H. W., grain and seeds.*
King & Co., C. A., grain and seeds.*
Morehouse & Co., wholesale grain and seeds.*
Southworth & Co., grain and seeds.*
Wickenhiser & Co., John, grain receivers, shippers.*
Young Grain Co., grain.*

TOPEKA, KANS.

Derby Grain Co., wheat, corn, oats, and millfeed.*
Golden Belt Grain & Elevtr. Co., The, recvrs. & shprs.*
Topeka Grain Co., wheat, corn, oats, mill & ctn. feed.*

TULIA, TEXAS.

Cowan Grain Co., W. C., wheat, oats, maize, kafir.*

WASHINGTON, D. C.

Wilkins-Rogers Mfg. Co., Inc., receivers and shippers.*

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Board of Trade Members.

Baker-Evans Grain Co., milling and export wheat.*
Beyer Grain Co., consignments and mill orders.*
Blood Grain Co., I. H., consignments, mill orders.*
Claiborne Commission Co., commission merchants.*
Clark Grain Co., C. M., all kinds grain and feed.*
Craig Grain Co., J. W., consignments and mill orders.*
Foot Grain Co., consignments.*
Hall Baker Grain Co., exporters.*
Hayes Grain Co., John, Okla.-Kan., wheat for mills.*
Hipple Grain Co., consignments.*
Kansas Flour Mills Co., receivers and shippers.*
Kramer Grain Co., receivers and shippers.*
Linton-Christy Grain Co., strictly brokerage & comm.*
Norris Grain Co., exporters.*
Raymond Grain Co., consignments.*
Simonds-Shields-Lonsdale Gr. Co., exporters.*
Smith-McLinden Grain Co., milling and export wheat.*
Stevens-Scott Grain Co., receivers and shippers.*
Strong Trading Co., wholesale grain and feed.*
Terminal Elevators, exporters.*
Wallingford Bros., receivers and shippers.*
Wichita Flour Mills Co., millers and grain merchants.*
Wichita Grain Co., receivers and shippers.*
Wichita Terminal Elev. Co., general elevator business.*

WICHITA FALLS, TEXAS.

Mytinger Grain Co., J. C., grain, feed, seeds.*

WINCHESTER, IND.

Goodrich Bros. Hay & Grain Co., whlrs. gr. and seeds.*

WINFIELD, KANS.

Daves & Daves, red mlg. wheat, mill feed.*

WOODWARD, OKLA.

Sharon Grain Co., wholesale grain.

*Member Grain Dealers National Association.

BUFFALO

The Townsend-Ward Co.,
Grain Merchandising and Consignments.

Globe Grain Co., Inc.
Receivers and Shippers.

Watkins Grain Co.,
Consignments.

A. W. Harold,
Grain—Barley a Specialty.

Whitney & Gibson,
Consignments. Our Specialty, Wheat.

J. G. McKillen, Inc.,
Receivers and Shippers.

Armour Grain Co.,
Grain Merchants.

McConnell Grain Corporation,
Commission Merchants.

A. C. Davis, Inc.,
Grain Commission

Burns Grain Co.,
Grain Commission.

Seymour-Wood Grain Co.,
Consignments.

Churchill Grain & Seed Co.,
Receivers and Shippers.

Pratt & Co.,
Receivers and Shippers.

Taylor & Bournique Co.,
Grain Commission.

The Electric Grain Elevator Co.,
Consignments.

Lewis Grain Corporation,
Ship Buffalo—Consign to Lewis

Sunset Feed & Grain Co., Inc.,
Receivers and Shippers

S. M. Ratcliffe,
Commission Merchants.

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New York Cotton Exchange
New York Produce Exchange
Chicago Board of Trade
Chicago Stock Exchange
Minneapolis Chamber of Commerce
Kansas City Board of Trade
St. Louis Merchants Exchange
Omaha Grain Exchange
Winnipeg Grain Exchange
Milwaukee Chamber of Commerce
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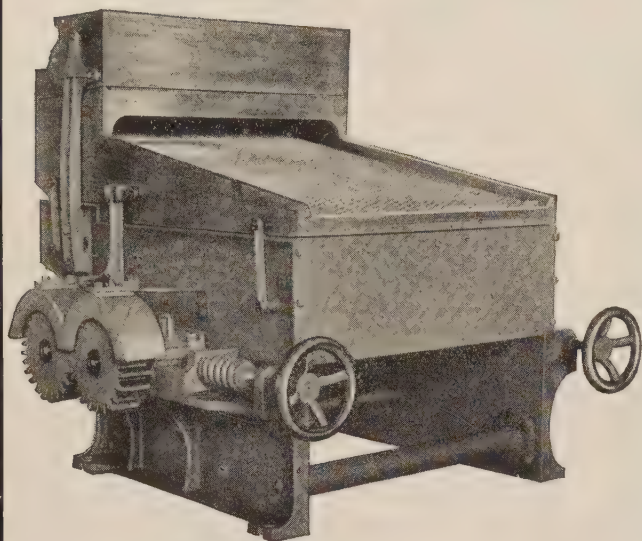
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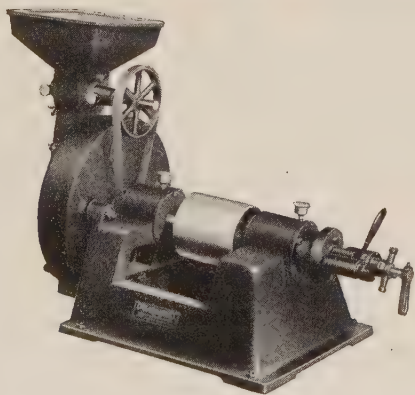
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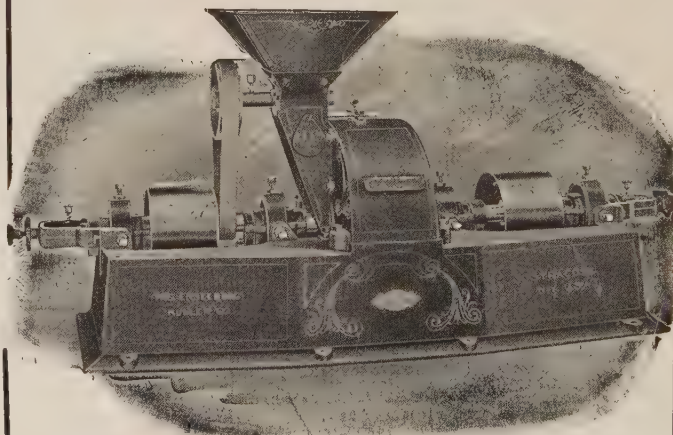
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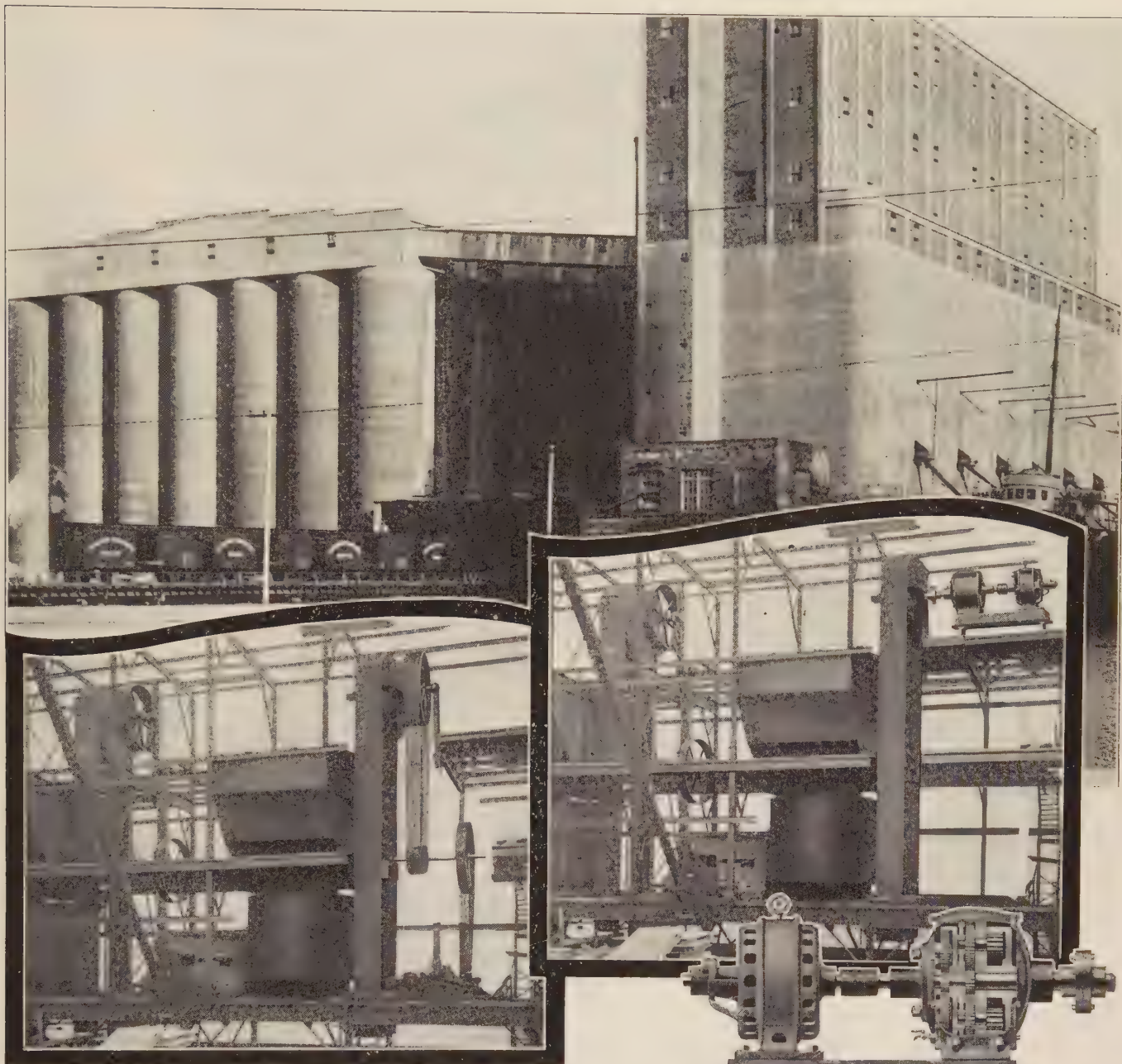
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Special Machinery Made to Order. Submit Your Blueprints.*

252-262 N. Curtis St.

Chicago, U. S. A.

What About Your Machinery

—IS IT READY FOR THE NEW CROP?

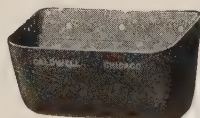
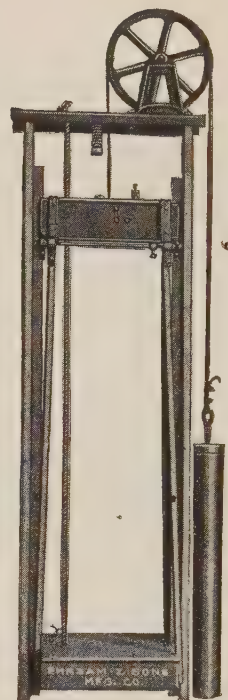
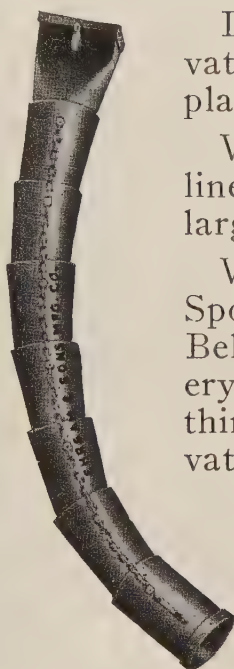
If you are planning on building a new elevator, or enlarging or repairing your present plant, the sooner you do it the better.

We are manufacturers of the most complete line of machinery in the middle west for either large or small elevators.

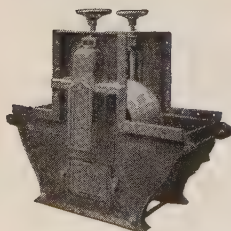
Write us for prices on Wood or Steel Legging, Spouting, Turnheads, Elevator Cups, Screw or Belt Conveyor, Power Transmission Machinery, Roller Feed Mills, Dumps, Manlifts or anything you need to properly equip your elevator.

Our catalog No. 22 sent on request.

The J. B. Ehrsam & Sons Mfg. Co.
Enterprise, Kansas

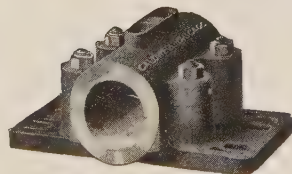


CALDWELL SERVICE



HALF a million dollars worth of well selected stock, constantly maintained, and an organization keyed up to the theory that plant efficiency is measured by the number of orders shipped on the day of receipt, accounts for Caldwell service.

If you need gears, sprockets, transmission machinery, Helicoid Conveyor or any of the Caldwell specialties promptly, wire Caldwell, or call up the nearest Link-Belt office. You will find Link-Belt Company offices in all principal cities.



H. W. CALDWELL & SON CO.

LINK-BELT COMPANY, OWNER

CHICAGO, 17th Street and Western Avenue

DALLAS, TEXAS, 709 Main Street

NEW YORK, Woolworth Bldg.



CALDWELL

Medusa Integral Waterproofing makes concrete walls and floors dry and keeps them dry

YOUR architect or consulting engineer knows what remarkable service Medusa Waterproofing has rendered for many years in notable construction work all over the world. He will gladly advise with you on its use in elevator basements, scale, receiving and elevator boot pits, and all other concrete work exposed either to a direct head of water or to ordinary ground moisture.

Medusa Integral Waterproofing is furnished in powder or paste form, to be added to any standard Portland cement while mixing, in the amount of 8 pounds per barrel of cement. In the mass it forms a lining for the pores or voids in the concrete that effectually and permanently stops the passage of moisture by capillary attraction or by direct pressure.

A wall constructed with Medusa Waterproofed Cement will remain dry enough inside to permit striking a match upon it, with water standing against the outside to a height of several feet.

Old concrete and masonry can be rendered effectually damp-proof by plastering with Medusa Waterproofed Cement plaster. In addition to Medusa Waterproofing, concentrated in powder or paste, we furnish Medusa Waterproofed Portland Cement, which is our standard gray cement with the waterproofing added in the correct proportions and thoroughly ground in at the mill.

Medusa Waterproof Cement Paint, applied with brush or spray to concrete and masonry surfaces, will damp-proof and ornament your walls, providing an attractive, lasting finish. Ask for literature.

Complete particulars, including detailed specifications, are given in an interesting booklet which we will gladly send upon request.

THE SANDUSKY CEMENT COMPANY
Department G. J. Cleveland, Ohio

Manufacturers of Medusa Stainless White Cement (Plain and Waterproofed); Medusa Gray Portland Cement (Plain and Waterproofed); and Medusa Waterproofing (Powder or Paste).

MEDUSA

WATERPROOFING

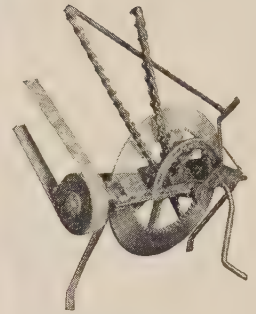
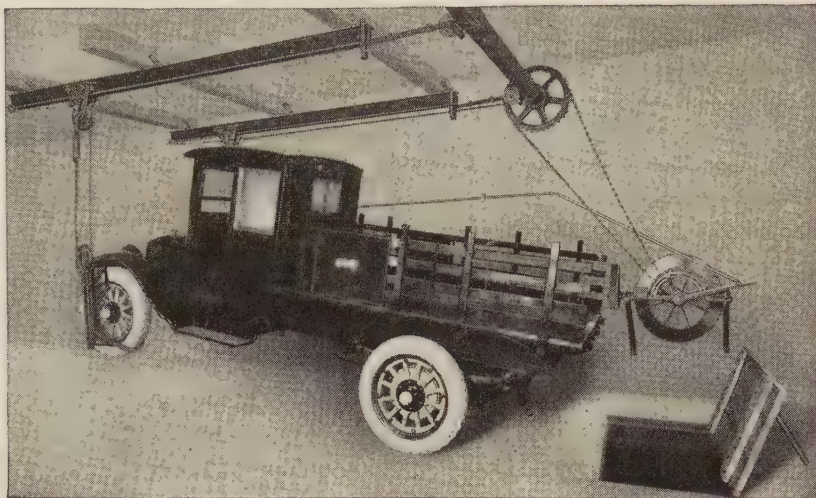
for CONCRETE



McMILLIN WAGON AND TRUCK DUMP



Wheel Attachment
and Trolley



Beveled Friction
Winch
Showing Both
Hand and Power
Operation

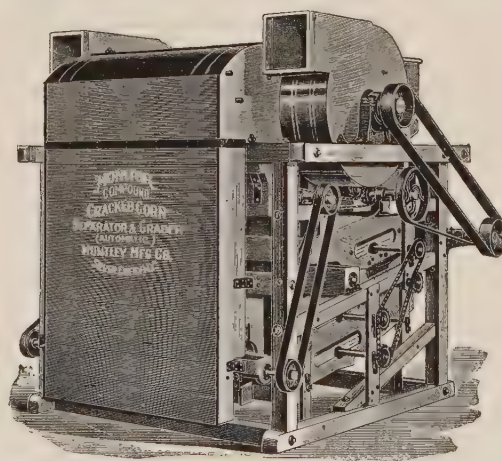
SIMPLE — DURABLE — PRACTICAL

This dump will fit your driveway. It is not necessary to reconstruct your driveway to fit the dump. Hoisting attachment is placed on trolley so any length vehicle can be dumped into the one dump door. By extending the track you can dump in several dump doors.

No extra weight lifted.
Can raise to any angle desired.
No alteration required in driveway floor.
Does not interfere with sinks.
Operated by hand or power.
Can operate when standing by dump door being used.
Handles the longest trucks as well as the shortest wagons.

Simple and easily installed.
Substantial in every respect.
Small amount of power required.
No parts to bind.
All parts in full view of the operator.
Mechanically perfect in every respect.
For further information address

L. J. McMILLIN, 525 Board of Trade Building, Indianapolis, Ind.



USING YOUR OPPORTUNITY

Just a little space in some unused corner given up to a MONITOR Cracked Corn Grader, means unsuspected earnings. Bring your idle spaces into action. Make the most of your opportunity. But if you grade cracked corn, do it right. In this regard, right means MONITOR.

Trade of this sort rightfully belongs to the elevator.

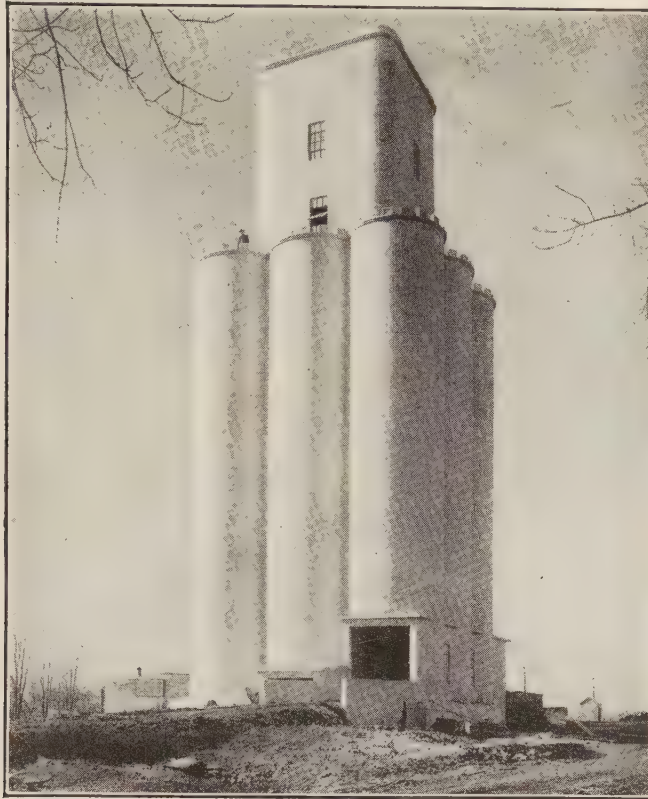
Canadian Plant
HUNTLEY MFG. CO., Ltd.
Tillsonburg, Ont.

HUNTLEY MFG. CO.

Department B

SILVER CREEK, N. Y.

(In writing, mention department)



Keep It Moving Into Your Bins

When the crop begins to move there is no time for anything but unloading grain—getting it from the farmers' wagons into your elevator.

Whether it goes into your house or your competitors' depends upon the care you gave to your belts during improvement time.

You can't afford a break-down now!

In "LEGRAIN" Goodrich offers operators and elevator builders a belt which affords maximum insurance against stoppage—a belt which exactly meets the requirements of the service. You can rely on "LEGRAIN" to carry you through many seasons.

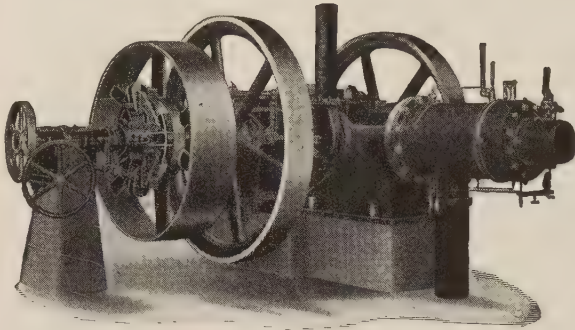
THE B. F. GOODRICH RUBBER COMPANY

Akron, Ohio

Goodrich

"Legrain" BELTS

"SOME POWER SAVINGS" —SAID THE MGR.



"Our logs show with the Muncie Oil Engine we have been able to increase production at a lower power cost than we have ever known before."

"That simple Muncie unit runs on the cheapest grade of Crude and Fuel oils, which are easily obtainable, anywhere. The Muncie is the ultimate of perfection in oil engine construction—so reliable and economical in operation and maintenance."

MUNCIE OIL ENGINES

are compact, easily accessible and simple in design and operation. Their sturdy construction guarantees unusually long life.

That Muncie is an economical power unit is attested to by the number of large corporations who, after exhaustive tests on all forms of power, have selected Muncie Oil Engines as the IDEAL power unit for all conditions. Sizes 10 to 250 H. P.

You will be interested in the catalog. Copy gladly sent on request.

These Features Distinguish Muncie Oil Engines:

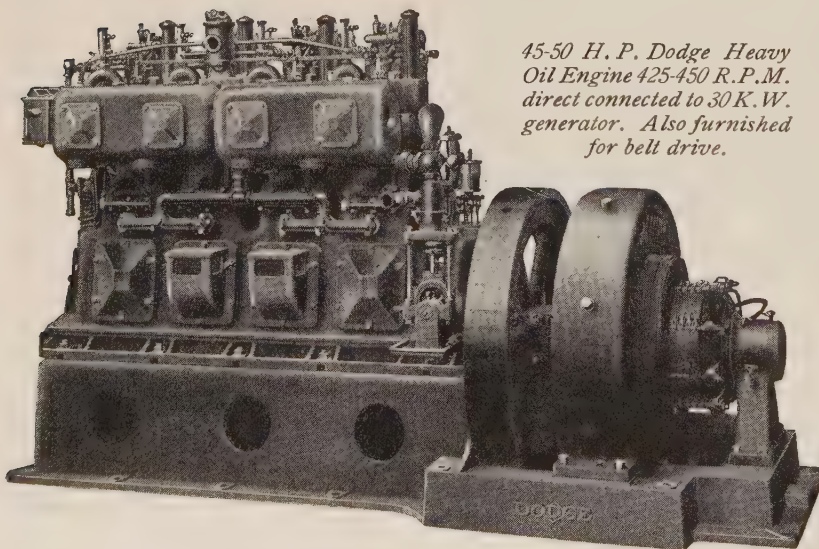
Slower Speed, Medium Compression, Heavy Duty Service, No Standby Loss, Medium Priced.

MUNCIE OIL ENGINE CO.

MUNCIE

INDIANA

Why not save 30% to 75% of your present power costs?



45-50 H. P. Dodge Heavy Oil Engine 425-450 R. P. M. direct connected to 30 K. W. generator. Also furnished for belt drive.

Dodge Heavy Oil Engines use low grade fuel oils on a guaranteed consumption basis of .5 of a pound per BHP hour. They will put power on your switchboard for half a cent per KW for fuel or may be belted direct to lineshaft for driving elevator machinery.

Aside from fuel economy Dodge engines lower insurance rates and reduce attendance costs to the minimum—no skilled supervision required. This engine is backed by the 42 years of Dodge prestige and reputation and is built to conform to the single high standard of performance by which we measure the products we build.

Let us tell you more about this remarkable and economical source of power.

DODGE

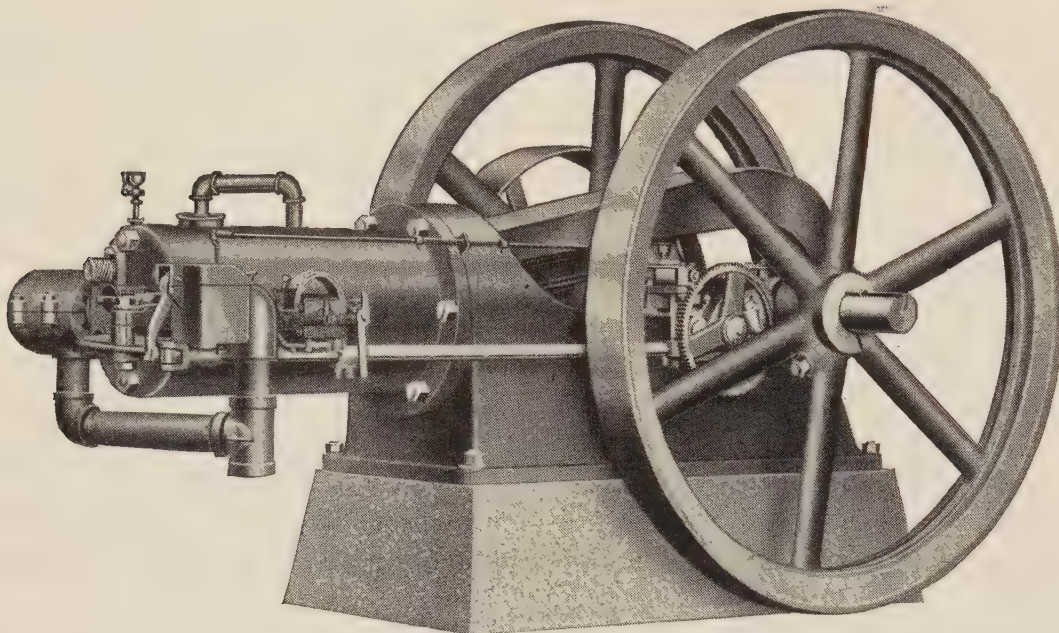
HEAVY OIL ENGINE

Dodge Sales and Engineering Company
Mishawaka, Indiana

WORTHINGTON



GASOLINE—KEROSENE—OIL ENGINES



CERTIFIED PREFERENCE

POSITIVENESS

Positive—Fuel Feed, Submerged Pump, no Packing.

Positive—Ignition, Webster Oscillating Magneto.

Positive — Interchangeableness of Parts.

Positive—Full Power and Economy.

Positive—Dependable Operation.

Positive—Personal Field Service.

THE man who is responsible for keeping the machinery in operation prefers the WORTHINGTON Engine because of its reliability and lasting service. He knows that WORTHINGTON Engines can be depended upon to do a full day's work, day after day, without annoying and expensive shut-downs or constant tinkering. He knows, too, of their economical, steady and even performance, and their adaptability to all installation and service conditions.

FOR every purpose to which Gasoline—Kerosene or Oil Engines are adapted—in the grain elevator, the factory, in water works and lighting systems, or on the farm, WORTHINGTON Engines give superior satisfaction and service. They combine the excellence of last-minute engineering features, good materials and high grade construction methods.

WORTHINGTON Engines are wonderfully simple and there are no intricate or delicate parts. All parts are positively interchangeable and easily accessible for replacement, adjustment or oiling. Engines are easily and quickly started, requiring only the minimum attention. Construction throughout is most rigid, insuring long life. Modern production methods and volume sales account for the low price.

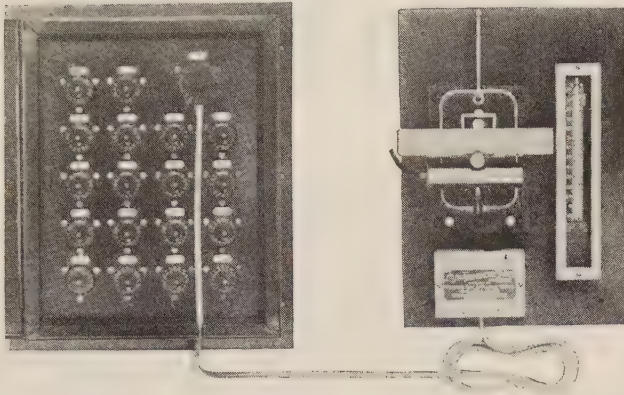
GET THE FACTS

THE WORTHINGTON name-plate on any piece of machinery is a guarantee of quality. The product has been on the market for eighty years and is internationally known. WORTHINGTON Engines are manufactured from the smallest size up to 4,000 H. P. and are guaranteed by this \$36,000,000.00 Corporation. Write for detailed information, bulletin A-1 and price list.

WORTHINGTON PUMP AND MACHINERY CORPORATION
156 Holthoff Place, CUDAHY, WIS.

STOCKS CARRIED IN ALL PRINCIPAL CITIES
MINNEAPOLIS OFFICE: 116 WASHINGTON AVE., NORTH





A Few Zeleny Installations

Cargill Grain Co.
Pillsbury Flour Mills
Bartlett Frazier Co.
Updike Grain Co.
Armour Grain Co.
Larabee Flour Mills
New Orleans Public Elevators
Maney Milling Co.
Buckeye Cotton Oil Co.
Red Star Milling Co.

The "ZELENY" Protects Your Grain

It is a simple device for testing the condition of grain stored in bins or tanks by giving at all times the accurate temperature of the grain, not merely at the bottom and the top of the bins, but at intervals of five feet up through the bins. It saves you money by eliminating unnecessary turning of grain, which entails shrinkage, time, labor, power and wear on machinery; prevents bin-burned grain; increases working capacity of plants by saving time.

Further data will be furnished on request.

Western Fire Appliance Works
542 S. Dearborn St. CHICAGO, ILL.



The "Climax" Scoop Truck

Can easily add **Ten Cents an Hour** to the value of a man's time who uses it in unloading Coal or Grain from box cars.

Hence, in two weeks' use the Scoop Truck will pay for itself and cost you nothing for its use thereafter.

It will last for years and save the wearing out of a dozen common scoops in doing a like amount of work.

Hundreds have tried it and will certify to the truth of these statements.

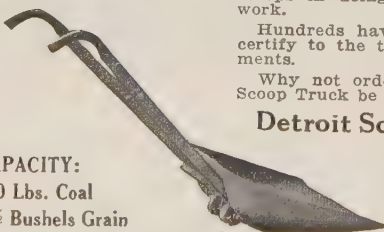
Why not order now and let the Scoop Truck be giving itself to you?

Detroit Scoop Truck Co.

Detroit, Michigan

CAPACITY:
200 Lbs. Coal
2½ Bushels Grain

Patented



Dust Collectors



alone do not prevent explosions in Elevators, but

DAY

Dust Collecting Systems do when properly installed.

The Day Company

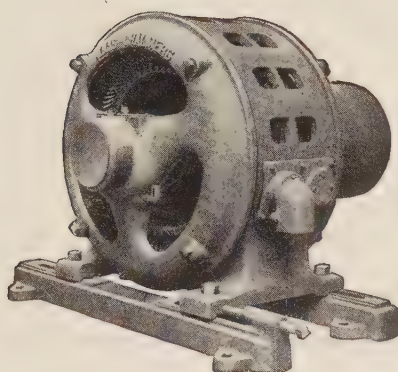
1006 Lyndale Avenue N.

Minneapolis, Minn.

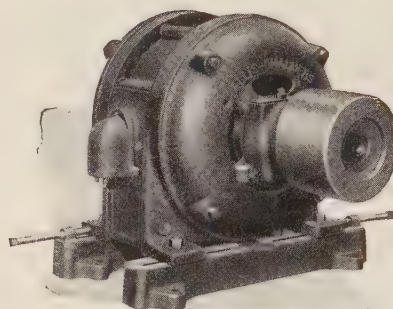
Polyphase Induction Motors

Built for All Classes of Service

Superior Design and Rugged Construction
makes them
Fully Dependable

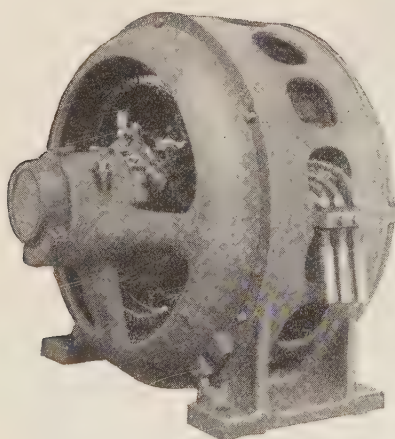


Type "AN" Squirrel Cage



Type "AR" Squirrel Cage
(Continuous Rated)

*Send for
Bulletins*



Type "ANY" Slip Ring

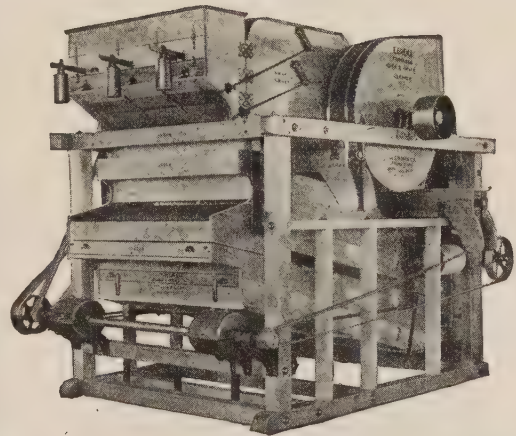
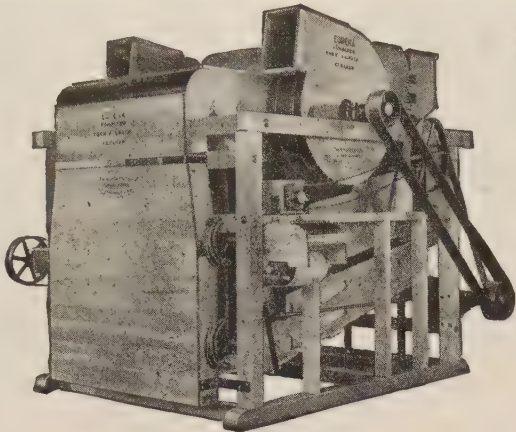
*Specify
Allis-Chalmers
Motors*



ALLIS-CHALMERS
MANUFACTURING COMPANY

MILWAUKEE, WISCONSIN. U.S.A.





Another "EUREKA"

Thoroughbred

Is our combined machine for cleaning both
CORN and SMALL GRAINS

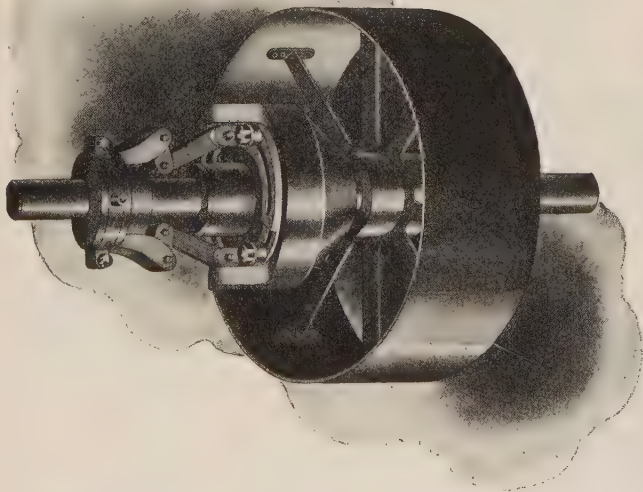
In this "EUREKA," mechanical excellence and practical utility go hand in hand. Here our engineering staff has scored a worth-while triumph—the first Combined machine without a drawback. You need this up-to-date, accessible, light-powered profit producer.

Our profusely illustrated
Bulletin No. 82 is yours for
the asking—write for it.



S. HOWES COMPANY, Inc.
Silver Creek, N. Y.

European Branch: S. Howes, 64 Mark Lane, London, Eng.



"Peerless" Friction Clutches

HAVE STOOD THE TEST FOR YEARS
and we can assure you complete satisfaction

Write us for circular and prices

OUR STOCK OF SUPPLIES
FOR MILLS and ELEVATORS
IS ALWAYS COMPLETE

ESSMUELLER MILL FUR. CO.
1216-1224 So. 8th St. ST. LOUIS, MO.

WHAT DO YOU NEED?

to modernize your plant so it will minimize
your labor and increase your profits? Is it here?

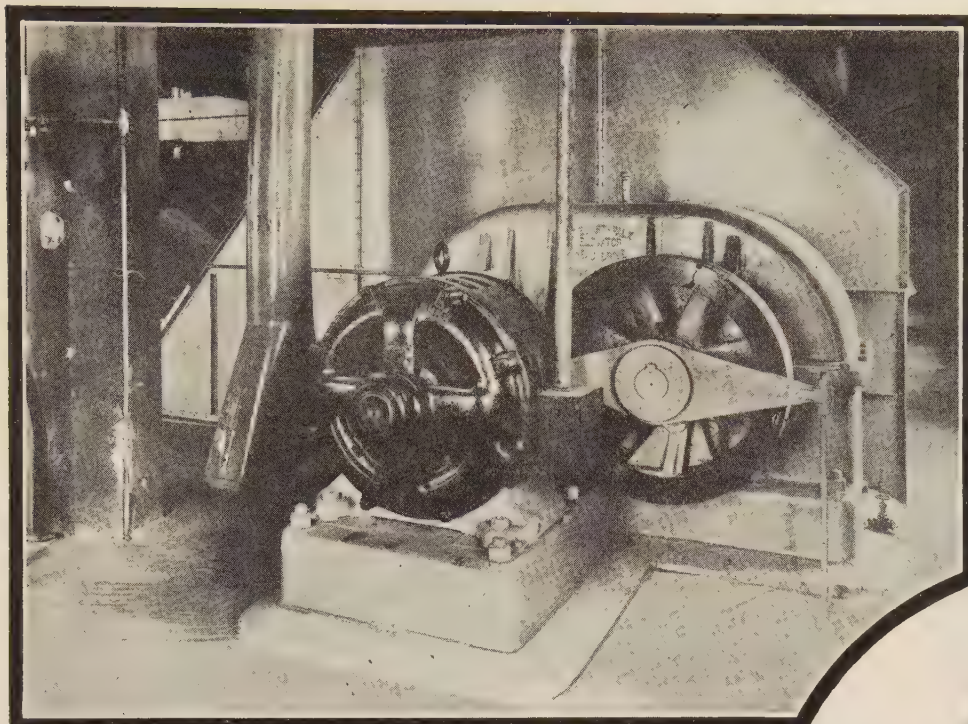
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Attrition Mill	Lightning Rods
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Bags and Burlap	Moisture Testers
Bearings { Ball	Mustard Seed Separator
Plain	Oat Bleachers and Purifiers
Roller	Oat Clipper
Belting	Painting or Repairing
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Buckets	Portable Elevator
Car Liners	Power { Kerosene Engine
Car Loader	Gas Engine
Car Mover	Motors
Car Puller	Power Shovel
Car Seals	Railroad Claim Books
Cleaner	Renewable Fuse
Clover Huller	Rolls for Cracking Corn
Coal Conveyor	Sample Envelopes
Conveying Machinery	Scales
Distributor	Scale Tickets
Dockage Tester	Scarifying Machine
Dump { Auto Truck	Self Contained Flour Mill
Wagon	Separator
Dust Collector	Sheller
Dust Protector	Sieves
Elevator Brooms	Siding-Roofing { Asbestos
Elevator Leg	Steel
Elevator Paint	Silent Chain Drive
Feed Mill	Spouting
Fire Barrels	Storage Tanks
Fire Extinguishers	Testing Apparatus
Grain Driers	Transmission Machinery
Grain Tables	Transmission Rope

or anything used in a grain elevator.

Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

INFORMATION BURO

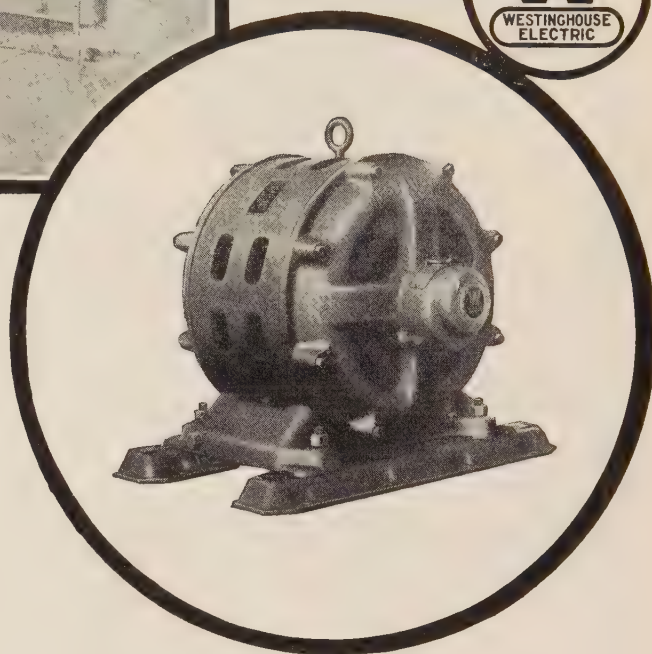
Grain Dealers Journal, 309 So. La Salle St., Chicago



Westinghouse Type CS Motor on an Elevator Head, Northern Central Elevator, Baltimore, Md



The Westinghouse Type CS Motor for Grain Elevators



Thorough study, and close contact with electric drives in grain elevators has enabled Westinghouse engineers to design a motor that fulfills the requirements of the various applications.

After years of experience it has been successfully demonstrated that the Westinghouse Type CS Motor is the superior drive for grain elevators. This ruggedly built motor assures steady service, which means maximum production with minimum cost of operation.

Westinghouse Electric & Manufacturing Company
East Pittsburgh, Pa.

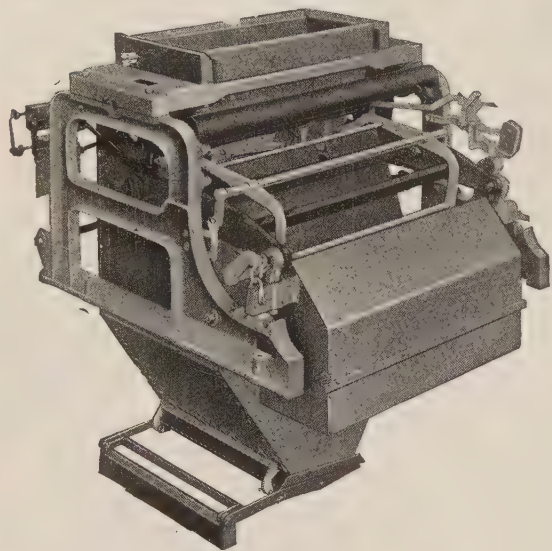
Westinghouse

Grain Shippers: Your Opportunity Lies in Safeguarding Every Shipment of Grain That Leaves Your Elevator

Be in a Position to Prove Your Weights

by using a

New Richardson All-Automatic Grain Shipping Scale



The dependable efficiency of the **NEW RICHARDSON** is acknowledged by thousands of shippers who are using this scale for careful, accurate loading. A user writes from Kansas under date of April 20, 1922—

"We have no trouble in getting claims allowed based on the weighing of your scales."

The New **RICHARDSON** is an entirely self-operating machine that completely avoids the possibility of man-made errors in weight.

Send for Bulletin 1219-F

Richardson Scale Company
Passaic, New Jersey

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Buffalo

San Francisco

Fabricated Steel Products

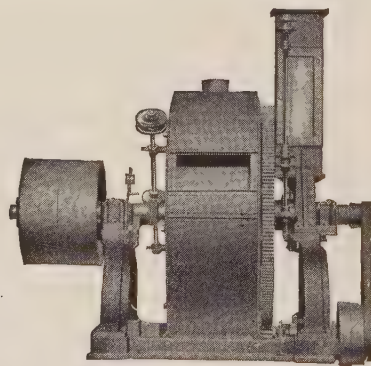
We specialize on **FABRICATED STEEL PRODUCTS** and are equipped to furnish steel plate products such as tanks, hoppers, stacks, conveyors, chutes, pipe, elevator legs, coal mine equipment, cement and concrete sheet steel forms promptly. Let us estimate on your requirements.

Corrugated Sheets Erected

We are specialists in furnishing and erecting **ROOFING & SIDING** of galvanized, painted or zinc sheets, corrugated or formed. Our mechanics are experts—they know how. Let us figure on your erection, no matter where located.

Our complete stock of galvanized, black, blue annealed sheet steel and zinc enable us to give immediate attention to all orders and inquiries received.

The Sykes Company
930 West 19th Place, Chicago, Ill.



**FOR PEARLING
BARLEY
PEPPER
WHEAT**

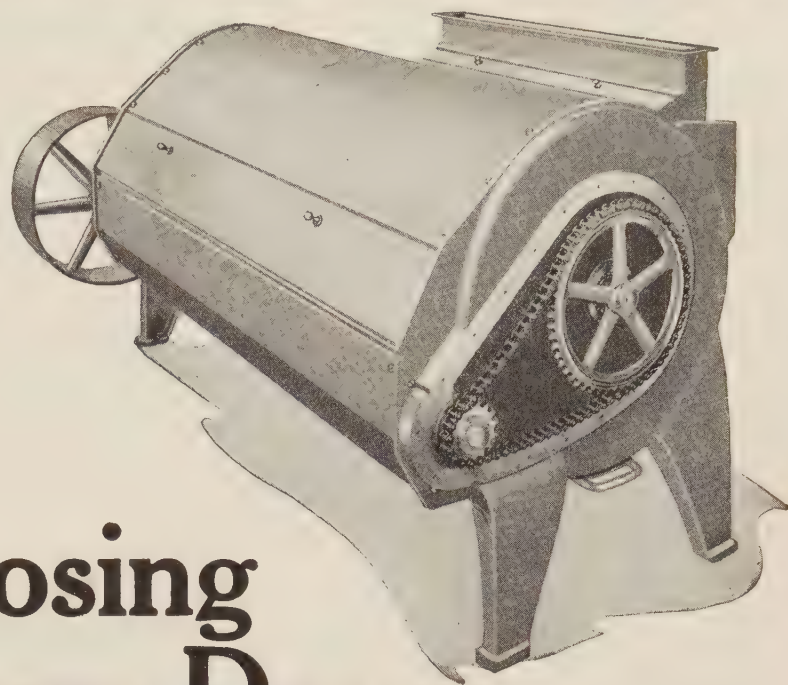
Use Triumph Pearlors if you want to produce pearled barley, or wheat or pepper. They will turn out a product that cannot be beaten.

Full information gladly furnished those interested

THE C.O. BARTLETT & SNOW CO.
Main Office and Works: Cleveland, Ohio

No. 1111

The industrial waste of today is the wealth of tomorrow. More gold is now mined from abandoned claims than the luckiest "Forty-niners" ever dreamed of. Bran was once dumped on the scrap pile. Former packing house wastes are now turned into fortunes. What waste is going on daily in your elevators? Find the answer in your screenings!



You are Losing Wheat Every Day

HOUR after hour, day after day, month after month—perfectly good wheat is dribbling away in your tailings and screenings! In many elevators this loss runs up into thousands of bushels of good milling wheat annually.

It will pay you to stop this big annual leak!
You can do it at once and for all time with the

CARTER
DISC
SEPARATOR

Even the lightest wheat, now blown away by fans, is saved by the Carter. Voluntary statements made by users throughout the country provide ample proof that the Carter stops the waste of wheat in the tailings.

Send us a 5 lb. sample of your screenings and we will tell you how much of the wheat you are now losing can be saved with Carter Disc Separator.

Carter Disc Separators insure **ABSOLUTELY CLEAN WHEAT**, free from dockage. Furthermore, the scouring action of the discs increases the test weight of wheat.

Try It At Our Risk In Your Own Elevator

We will ship you a Carter Disc Separator and allow you to give it a reasonable trial at our risk. If you then find it is not satisfactory to you in all respects, we agree to accept its return and give you full credit for it.

Every day you delay installing a Carter means money lost. Write today.

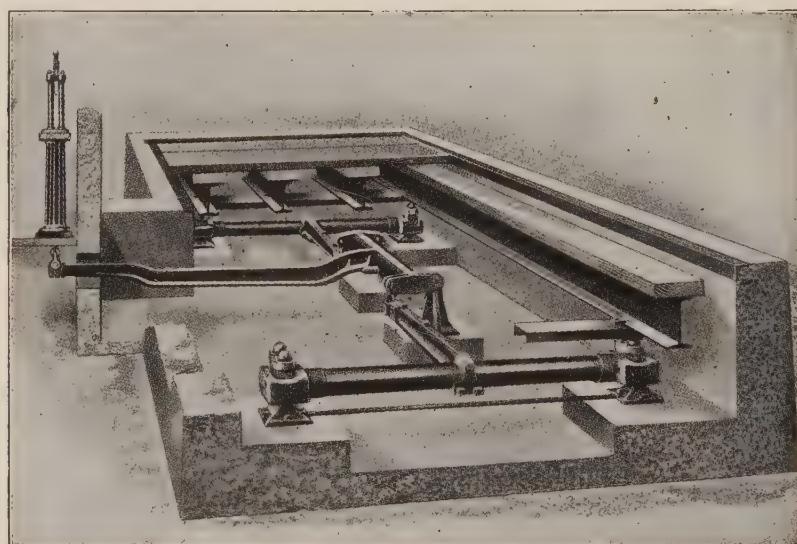
Carter-Mayhew Mfg. Co., 611 Fifth Ave. S., Minneapolis

In Canada: Manufactured and Sold by the Strong-Scott Mfg. Co., Ltd., Winnipeg

Howe Ball Bearing Auto Truck and Wagon Scales

The cut below shows our **Special** 10-Ton Auto Truck and Wagon Scale for Country Elevators and Coal Yards. Platform 16x8 and Full Heavy Steel Four I Beam Construction, with Angle Iron Outside Frame.

H
O
W
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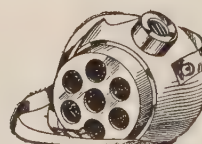
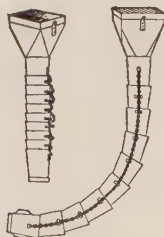


H
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Over 200 of these Special Scales sold in Nebraska and Iowa in 1920. Send for this list. Write users and get their opinions of this **Special** Scale.



Minneapolis V Buckets
Salem & Empire Buckets, Large Stock

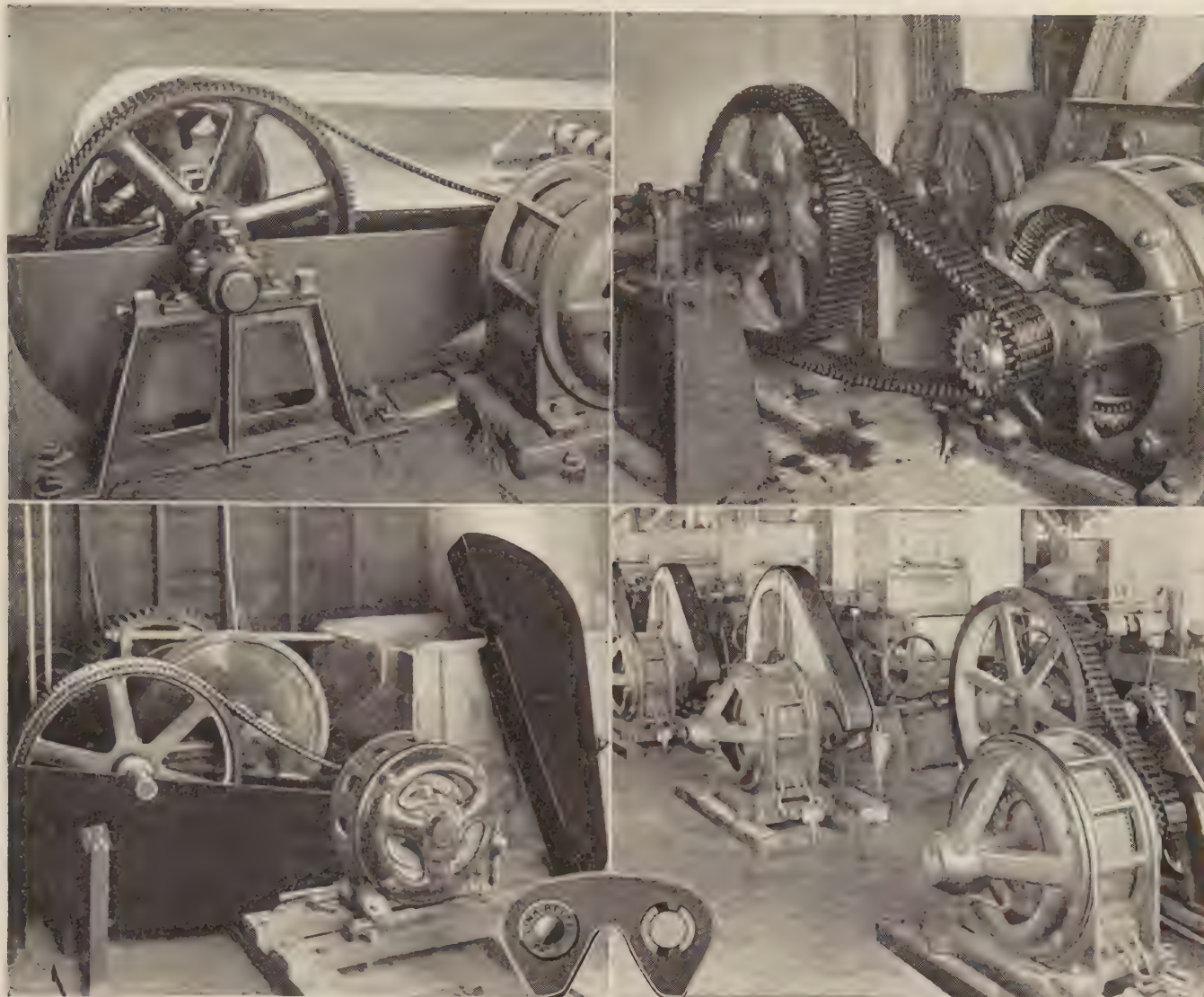


Dust Protectors



Complete stocks of all kinds of Pulleys, Belting, Sprockets, Loading Spouts, Grain Spouting and everything for a complete elevator. Write us.

AMERICAN SUPPLY & MACHINERY CO.
O M A H A 1102 Farnam Street N E B R .



Progressive Builders Specify Silent Chain Drives

LINK-BELT Silent Chain, the efficient transmitter of power, is being generally specified by the progressive builder of grain handling plants.

He knows of its performance thru close contact and observation of many installations. It meets his ideal of the qualities that a power transmitting medium should possess.

Here are some of the advantages of Link-Belt Silent Chain: It transmits power without slip. Runs on short centers, making an econom-

ical arrangement of machinery possible. It is 98.2% efficient on actual test. Briefly it is, Flexible as a Belt—Positive as a Gear—More Efficient than Either.

Based on our experience of 15 years we recommend the use of casings for drives in grain handling plants. They not only protect the drives from dust, but automatically lubricate them. They also insure safety to employees and practically eliminate the fire hazard.

LINK-BELT COMPANY

PHILADELPHIA

CHICAGO

INDIANAPOLIS

BUFFALO.....547 Ellicott Square
CLEVELAND.....429 Kirby Bldg.

KANSAS CITY, MO.....306 Elmhurst Bldg.
DENVER.....Lindrooth Shubart Co., Boston Bldg.

940

LINK-BELT

SAVE TIME AND MONEY! BUY YOUR

Grain Elevator, Corn and Feed Mill, Conveying and Power Transmission Machinery

DIRECT FROM THE MANUFACTURER

Attrition Mills
Buhr Feed Mills
Corn Shellers
Corn Cleaners
Dust Collectors
Ear Corn Crushers
Employees' Elevators
Exhaust Fans
Feed Mixers
Feed Packers
Feed Screens
Grain Dryers
Grain Scourers
Grain Separators
Grain Sieves
Man Lifts
Meal Sifters
Roller Feed Mills
Wheat Magnets

Auto. Grain Scales
Belting, all kinds
Belt Supplies
Belt Conveyors
Car Pullers
Conveyor Parts
Distributing Spouts
Elevator Supplies
Grain Samplers
Grain Testers
Hopper Scales
Loading Spouts
Perforated Metals
Power Shovels
Steel Conveyors
Steel Grain Scoops
Turn Heads
Truck Dumps
Wheat Steamers

Bearings, all kinds
Belt Idlers
Belt Tighteners
Cast Iron Pulleys
Couplings, all kinds
Drop Hangers
Friction Clutches
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Link-Belting
Manila Rope
Pillow Blocks
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Safety Set Collars
Sprocket Wheels
Steel Shafting
Tension Carriages
Wire Rope
Wood Split Pulleys

Let Us Quote on Your Requirements



BARNARD & LEAS MFG. CO.

**MILL BUILDERS AND
MILL FURNISHERS**

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.





Salem Steel Elevator Buckets

Standard Quality Elevator Equipment

As pioneer manufacturers of Elevator equipment in the west our experience and facilities place us in a position to produce equipment which is superior in quality and workmanship.

Our Salem Bucket is formed from one piece of steel securely riveted or spot-welded at the back, the ends are lapped over the main body by forming dies, making a tight, durable and smooth joint.

Flexible Car Loading Spouts

We furnish these spouts in any length, diameter or gauge of steel with round or square head. Each spout is treated to a heavy coat of best black asphaltum paint.

The most desirable feature of this type bucket is the capacity increase of old elevators. This bucket may be spaced on belt with only $\frac{1}{4}$ to $\frac{1}{2}$ inch space between buckets, where the ordinary type is spaced 10 to 24 inch centers.

WRITE TODAY—for our new catalog giving complete description and prices on our full line of mill and elevator equipment.

Standard Steel Works

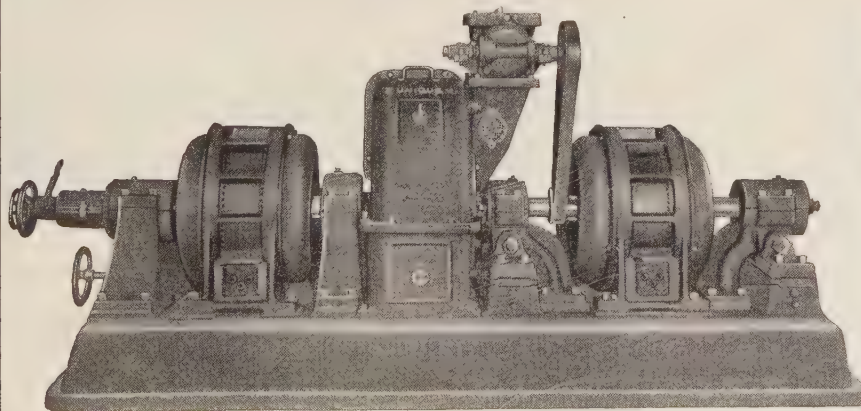
16th and Holmes Sts. North Kansas City, Mo.

Minneapolis "V" Type High Speed Buckets



Increase Your Sales of Flour and Feed

Easy to say—but you want to know how to do it.
BUY a Unique Ball Bearing Attrition Mill.



(Belt Driven If Preferred)

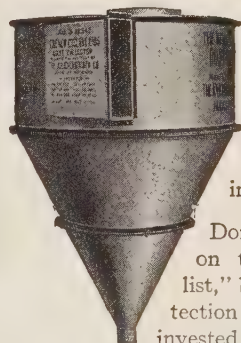
Grind feed for the farmers the way they want it done. They cannot do it themselves, and when you are grinding feed for them you can sell them flour and feed. You would be surprised, perhaps, to hear that farmers sometimes drive 15 miles or more across country to get feed ground on a Unique. IT'S A FACT.

Write **ROBINSON MFG. CO.,** P. O. BOX 411, MUNCY, PA.

Chicago Office: 416 Western Union Bldg.
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1131 S. 2nd St. Louisville, Ky.

79 Milk St. Boston, Mass.
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WHEN EVERY AGENCY FOR
SAFETY OPERATION SAYS
"DO AWAY WITH DUST"
IT'S TIME THAT YOU LISTENED TO REASON—



The hundreds of thousands of dollars lost through dust explosions would equip every elevator in the country.

Don't be the next on the "Blow up list," but for the protection of the money invested in your business investigate our product.

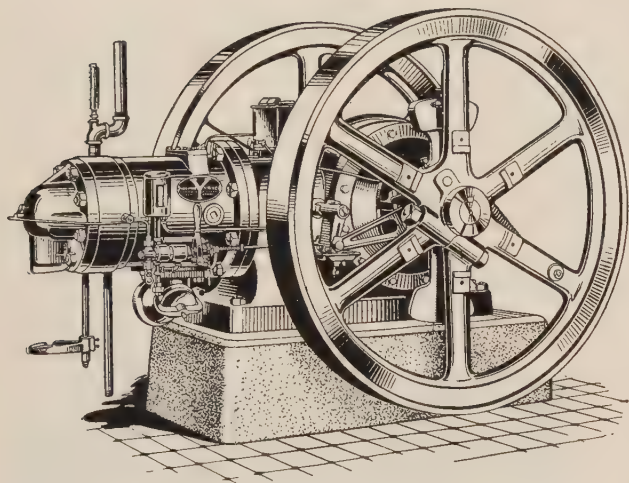
The New "1905" Cyclone Dust Collector

THE FACTS ARE MIGHTY INTERESTING

The Knickerbocker Co.
JACKSON, MICH.

FAIRBANKS-MORSE

"Y" Oil Engines



**Cut Power
Costs—Use
Fuel Oils**

"Y" Engine power in your elevator will help you keep the grain moving. Unfailing low cost power from fuel oils — easily obtained and easily stored.

"Y" Engines, 10 H. P. to 300 H. P., are simple and rugged in construction — easy to start and operate. They require no attention while running—no high engineering skill to operate—any good workman can turn on the fuel and shut it off when the day's work is done—and that's all that is necessary to get a full day's economical power service from the "Y".

An investigation of "Y" Engine performance will be a big step toward lowering the cost of your elevator operation.



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**REMODELING and OVER-
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*If you have any changes in view, write
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out cost to you to estimate your work.*

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MINNEAPOLIS MINNESOTA

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A book for the use of country grain buyers in keeping a record of grain received from farmers. Some dealers record oats receipts in front and corn receipts in the back of book; others use a separate book for each kind of grain.

Its column headings are: Month, Day, Name, Kind, Gross and Tare, Net Pounds, Bushels, Pounds, Price, Dollars, Cents and Remarks.

The book is 9½x12 inches, 160 pages, 20 lines to each page, giving room for recording 3,200 loads, printed on Linen Ledger Paper and is well bound in strong board covers with leather back and corners. Order Form 380.

Price, \$2.75

GRAIN DEALERS JOURNAL

309 South La Salle St., CHICAGO, ILL.



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Modern grain-handling machinery, such as designed and manufactured by this house will help you handle grain at a *real profit*. Years of actual work under all conditions has proved the efficiency of our machinery.

There is going to be a lot of remodelling and new machinery installed this summer to promote elevator efficiency.

How about *your* elevator? Write us before doing anything definite.

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"Everything for Every Mill and Elevator"

Minneapolis, Minnesota

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Costs less installed than other reliable devices

A Kewanee All Steel Truck Lift reaches you in four major units *completely assembled*. It is not a "cut and fit" outfit which you must assemble. There are no costly inclines to build—no expensive alterations to make in your driveway. Any handy man who can work concrete and use a pipe wrench, saw and hammer can, with one common helper, install the average Kewanee job in less than two days' time.

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So while the *first* cost of a Kewanee may be a trifle more than for some other lift the *actual cost*—installed and ready for use—*is less*.

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Sold and installed by most all reliable elevator contractors. If your contractor does not have blue prints and prices write us direct.

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Kewanee, Illinois

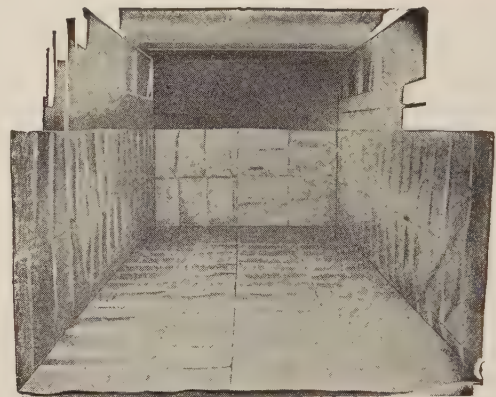
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Cause the loss of many hard earned dollars to shippers of grain and seed

MUCH OF THIS LOSS can be saved by the use of **Kennedy Car Liners**. These car liners practically condition a bad order car and enable shippers to load cars that otherwise would be rejected.

KENNEDY SYSTEM of car liners prevent leakage in transit and afford a maximum insurance at minimum cost.

KENNEDY CAR LINERS are made for all cases of bad order cars, consisting of full Standard Liners, End Liners and Door Liners.

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Made Only by

The Kennedy Car Liner & Bag Co.

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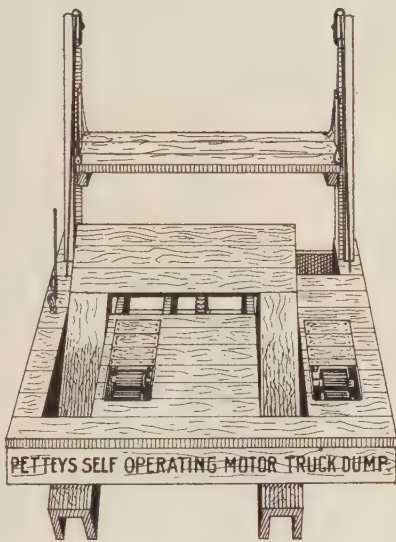
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Prompt shipment of Corrugated or Flat Sheets for elevator siding at rock bottom prices. We will be glad to quote attractive prices on large or small requirements. Write for stock list.

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Petteys Self-Operating Motor Truck Dump

Saves Time

Saves Operating Expense

Is Always Ready

Costs Less for the Service
Given Than Any Truck
Dump on the Market

Write for prices and literature

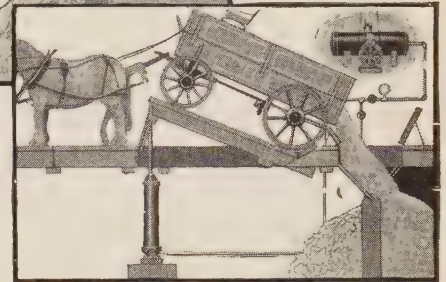
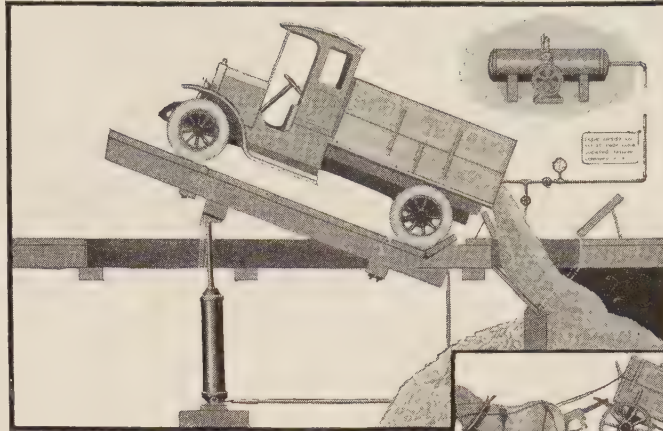
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Globe Combination Auto Truck & Wagon Dump

SIMPLE - RELIABLE - PRACTICAL

(SPENCER PATENTS FEB. 1919)



Are You Dumping 100%?

We guarantee the Globe Dump to dump any size truck, wagon or sled into one pit hole.

The Globe Dump is Guaranteed to Dump any given load with Less Air or dump more loads with a given amount of air THAN ANY OTHER air controlled dump on the market today.

Can be installed in any driveway or in connection with any make, type or size scale.

No chaining or blocking—no gears or guides—easily installed—quick in operation—dumps any load in 45 to 70 seconds.

Its Superiority Proven by Four Years' Satisfactory Service and backed by a company of 29 years' Successful experience in Serving the Trade.

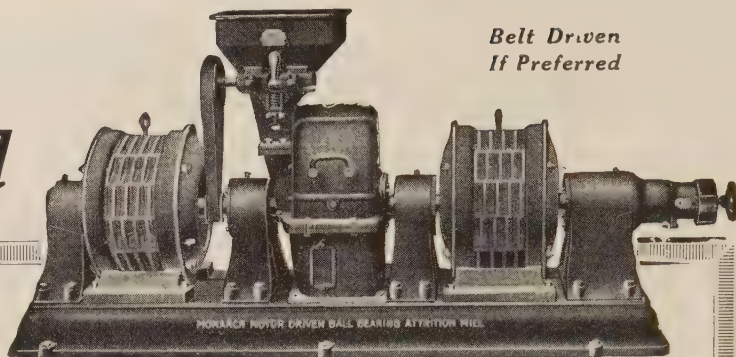
These are some of the reasons why more Line Elevator firms and more Contractors use the GLOBE Dump than any other dump.

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TO invest money in a feed grinder on the assumption that the merits of all grinders are about equal is purely a game of chance—with the odds **against the buyer.** The safe way to select a grinder is to first get complete and definite knowledge of its qualities and service records.



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Write and ask us to explain in detail why the Monarch Ball Bearing Attrition Mill is the first choice of so many grain elevator operators who have learned from experience how to judge merit with accuracy and discrimination.

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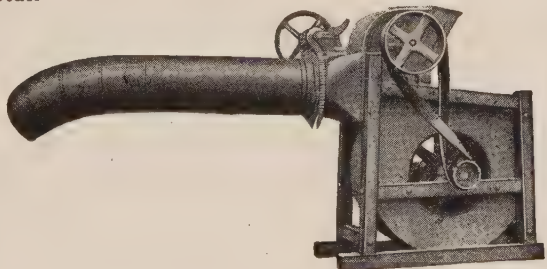
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MONARCH
BALL BEARING
ATTRITION MILL

CLEAN AND LOAD IN ONE OPERATION

To make the most money these days the grain elevator operator must operate his plant as economically as possible; he must ship the highest grain possible and it must be clean. To get the maximum in loading facilities and at the same time clean the grain loaded every elevator operator should install

The
Combined
Grain
Cleaner
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Pneumatic
Car
Loader



It does not mill or crack the grain; fills cars to full capacity; strong, durable, requires no attention after starting. Cools and dries the grain as it passes through the air.

Used by hundreds of elevator owners. List of users will be sent you upon request.

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The Boss Air Blast Car Loader will load the largest cars without any scooping in a hot, dirty, dusty car. Both ends loaded at the same time. They CANNOT injure the tenderest grain because grain does NOT pass through fan. One-Way spout furnished if desired. Spout detachable and adjustable up or down. 30 days' trial allowed. Grain cleaner attachment free. Grades raised. Make your house modern by installing one. New catalog No. 22 and prices mailed upon request.

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because of its better protective properties meets this requirement perfectly.

It is a natural combination of flake graphite and silica, as mined only by ourselves. It will not peel, crack or flake off because of the natural elasticity of the graphite, while the silica is an anchor that withstands wear.

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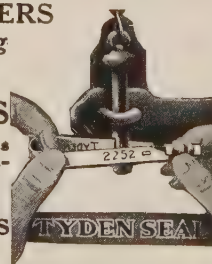
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Bearing shipper's name and consecutive numbers.

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CLAIM LOSSES

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Grain Testing Scales



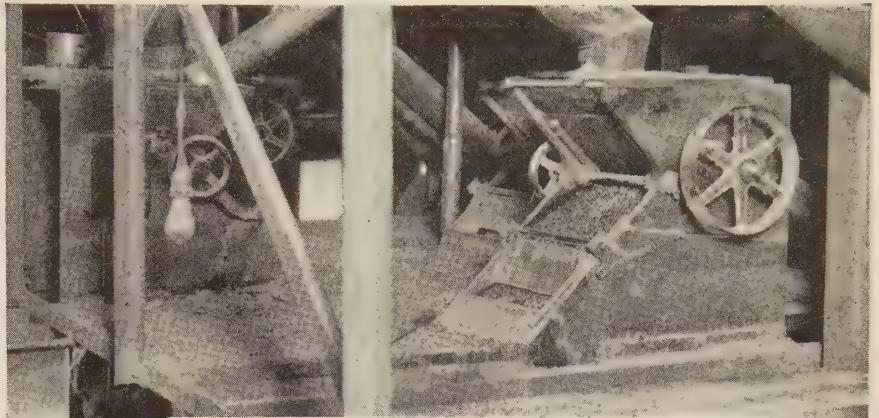
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INSURANCE, although a necessity, never stopped an explosion or fire. The old type horseshoe or permanent magnet is only partially effective in removing iron from grain that is fed to crushers or mills. It is not a positive means of removing the finest particles of iron; and therefore it does not offer positive protection from the fragments of iron that cause sparks—and fires or dust explosions.

The powerful electro-magnets in the Dings Magnetic Separator not only eliminate the explosion and fire hazard, but also lengthen the life of crusher rolls and other pulverizing machinery in flour and feed mills and elevators. Ask for special bulletin written to you and for you.

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Magnetic Separation

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This book contains 125 leaves of scale tickets, four to a leaf. Each leaf folds back on itself so as with the use of a sheet of carbon to make a complete and perfect copy of the original on the stub which remains in the book. The original tickets form the outer half of the page, so the removal of any ticket does not release the others.

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Grain Dealers Journal, 309 S. La Salle St., Chicago, Ill.

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It PAYS to GRIND ALL GRAINS

Look to the Grinders. They do the work! Bowsher's Cone-Shape grinders are the correct principle in Feed Mill construction. They mean larger grinding surface close to center of shaft; thus More Capacity, Lighter Draft, Longer Life.

"Desire to express my appreciation of the long-lasting, trouble-proof Bowsher. Have used a No. 4 ten years with less than One Dollar per year for repairs." R. W. Watt, Jacobsburg, O.

10 sizes; 2 to 25 H. P. Write for free catalogue. G. N. P. BOWSHER CO., SOUTH BEND, IND.

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A Reduced Cost of Handling Grain

makes the Best Elevator obtainable a profitable investment.

Ask for Suggestions on Saving Material, Power and Labor, before completing plans for your new elevator.

30 Years Practical Experience

YOUNGLOVE CONSTRUCTION CO.
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may cost a little more to construct, but they give better protection to grain from fire, wind, insects and heat. In fact, the experience of many operators of concrete elevators supports the conviction that not only does grain keep better in concrete storage, but it is oftentimes improved by such storage.

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Builder of
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Your Needs
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Four Stewart Link-Belt Grain Car Unloaders

See them in operation and be convinced of their great saving in labor cost.

James Stewart & Co., Inc.

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"We have built for many of your friends. Eventually we will build for you. Why not now?"



GROUP OF TERMINAL ELEVATORS BUILT RECENTLY BY US AT

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FOR

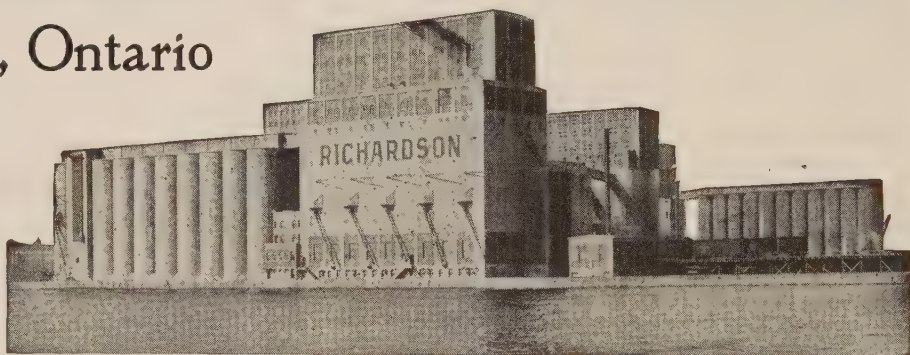
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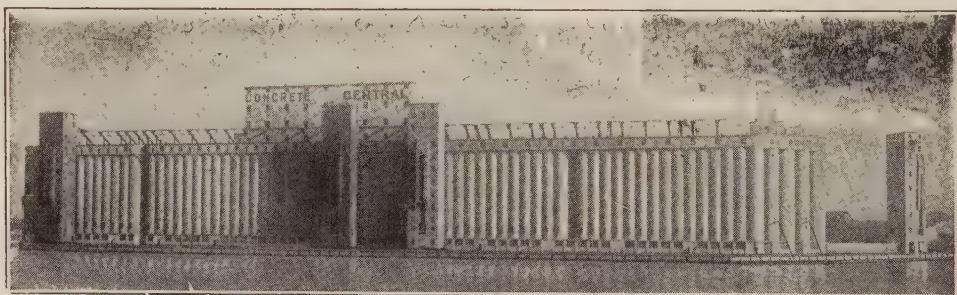


Monarch Built Elevators

assure you economical design, first class work, efficient operation.

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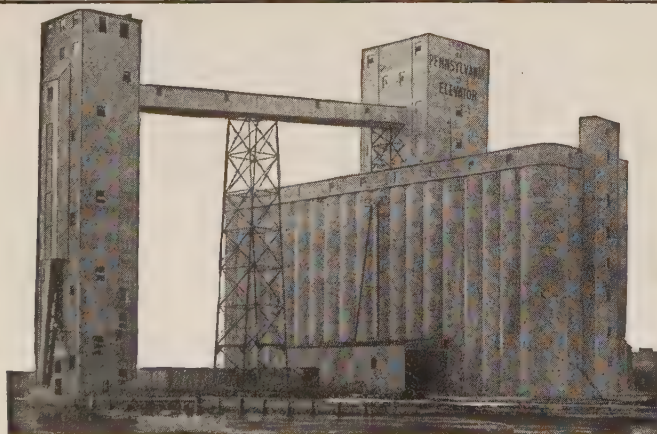


Concrete Central Buffalo, 4,500,000 Bu.

One of the modern houses which has made a record for rapid and economical handling

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Pennsylvania Railroad Co.'s Terminal Elevator at Erie, Pa. 1,250,000 storage capacity, with marine leg, 25,000 bu. receiving capacity. All concrete, modern construction, with latest improvements.

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Contractors and builders of high grade elevators. Our houses especially designed for high efficiency at minimum cost of operation.

Our engineering department is at your service.

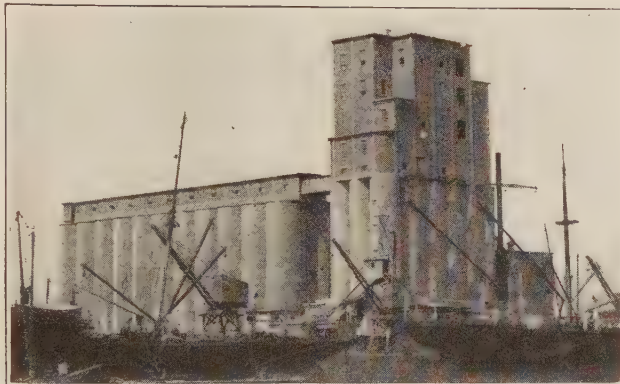
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Headquarters for Grain Elevator
Equipment for the South-
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White Star Special Equipment
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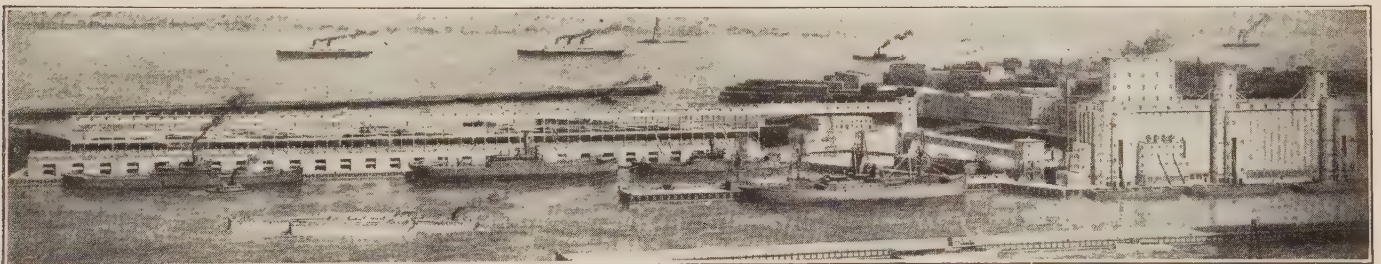
Grain Elevator Engineers

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JOURNAL
Chicago, Illinois

JONES-HETTELSATER CONST. CO.

Designers and Builders of
GRAIN ELEVATORS and FLOUR MILLS
706 Mutual Bldg., Kansas City, Mo.

L. J. McMILLIN ENGINEER and CONTRACTOR of GRAIN ELEVATORS

Any Size or Capacity
523 Board of Trade Bldg., Indianapolis, Ind.

WE READ the Grain Dealers Journal at
both of our offices and am sure we profit
by it.—C. H. Clark Grain Co., Cooks, O.

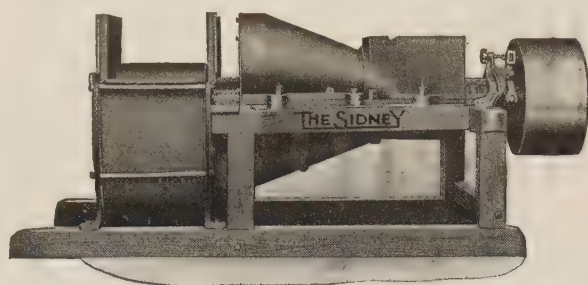
Don't Let The Big Crop Catch You
With A Poorly Running

ELEVATOR or FLOUR MILL

We Can Correct The Ills. Our 20 Years'
Experience Is at your Service.

Delivuk-Orino Construction Co.
Designers and Builders

GRAIN ELEVATORS AND FLOUR MILLS
CONCRETE, STEEL OR WOOD
REALTY BLDG. SPOKANE, WASH.



Combined Sheller and Boot

The illustration above shows the Sidney Combined Sheller and Boot, a combination of the standard sheller and elevator boot combined. The advantages of this machine are many. Expensive hoppering under sheller to the boot is eliminated. It also does away with a deep pit or tank which is always a source of much trouble to the elevator owner. The corn and cobs are delivered direct to the buckets which are always evenly filled.

The SIDNEY

Line of grain elevator machinery, which has for so long given satisfaction to grain elevator operators, is now being manufactured by a newly organized company. This Line comprises corn shellers, corn and grain cleaners, grain drags, wagon and truck dumps and a complete line of wood heads, cast iron boots, spouting and power transmission. The new company will also keep in stock at all times leather, rubber and canvas belting, Salem buckets, link belt, in fact everything needed to equip an elevator. Prompt service is assured.

Write for Catalog

The Sidney Grain Machinery Co.

Successor to Philip Smith Mfg. Co.

Sidney, Ohio

DIRECT HEAT OR STEAM'S CONTINUOUS FLOW MADE IN ALL SIZES

Randolph Grain Driers

WIRE WASTE PHONE

O. W. RANDOLPH CO. TOLEDO OHIO U.S.A.



SIDNEY ELEVATORS AND MAN LIFTS
are Money Makers
They will reduce your handling expense and speed up your work. Easily installed. For quotations give your requirements.
SIDNEY ELEVATOR MFG. CO.
Sidney, Ohio

THE BUSY SEASON

of elevator building and repairing is here. Repairs are big items in maintenance of machinery. Shrewd purchasers estimate and calculate them closely.



ECONOMY OF SPACE and ECONOMY IN USE are important features.

The HALL SIGNALING DISTRIBUTOR

is a simple, efficient, durable device which accomplishes ends none others reach as a thousand users will testify.

If you had two legs in your elevator, one of them a HALL SPECIAL with 7x5½ inch "Omaha" cups, the other an ordinary leg with 11x7 cups, the HALL SPECIAL would elevate the most grain, do it with less attention, and less cost.

It would cost less to build, and less to maintain. It would elevate steadily, uniformly, reliably. Write for our Catalogs.

Hall Distributor Company, 222 Railway Exchange Bldg., Omaha, Nebr.

Cover's Dust Protector

Rubber Protector, \$2.00

Sent postpaid on receipt price; or on trial to responsible parties. Has automatic valve and fine sponge.

H. S. COVER
Box 404 South Bend, Ind.



If you have a good thing

**Tell the Grain Dealers—
They'll do the rest—**

Advertising is the quickest and best way—but it must be the right kind of advertising.

If you have spent your good money without satisfactory results, it's a case of wrong article or wrong advertising.

The easiest, most direct, most popular and most effective way to the grain dealer is The Grain Dealers Journal route.

Try it.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE.

WESTERN IOWA—Three elevators and loading station; fine territory; no competition. Address 48F12, Grain Dealers Journal, Chicago.

N. W. MISSOURI 10,000 bu. elevator for \$7,000. Good town and fine prospects for crop. Address 48J22, Grain Dealers Journal, Chicago.

SOUTHERN MINNESOTA elevator for sale; good cribbed house and good grain point. Address 48J2, Grain Dealers Journal, Chicago, Ill.

SO. EAST NEBRASKA 25,000 bu. iron clad elevator for sale; new; good location and fine crop prospect. J. G. Norcross, Beatrice, Neb.

NO. CENTRAL INDIANA elevator of 25,000 bu. capacity for sale; located on P. C. C. & St. L., in good corn and oats belt. Address 48G5, Grain Dealers Journal, Chicago.

WEST. IOWA 32,000 bu. metal clad elevator for sale, on C. M. & St. P.; other buildings in connection; side lines; town of 2,000. Address 48J18, Grain Dealers Journal, Chicago.

E. CENT. INDIANA grain elevator for sale. This elevator is new and in good condition. Capacity 12,000 bu. On a good railroad and in good country. Address Lock Box 56, Waveland, Ind.

OHIO elevator, exceedingly well located for a profitable business, on the B. & O. and easily connected with the Pa. R. R. Failing health reason for selling. For further particulars write S. M. Thorne, Sabina, Ohio.

MISSOURI—15,000 bu. elevator for sale on Wabash R. R., in good territory; electrically operated; only elevator here; carry all side lines; doing good business. Want to retire. Address 47X16, Grain Dealers Journal, Chicago, Ill.

FOR SALE—Elevator 6,000 bu. capacity, located in good wheat belt on C. M. & St. P. R. R. near K. C.; also good feed business in connection. Priced right. Good reasons for selling. Address 48F11, Grain Dealers Journal, Chicago.

WISCONSIN—Splendid Business Opportunity—Elevator, grain, flour and feed business for sale. Very large territory, retail and wholesale; city of 5,000; large farming community; 2 railroads. Get particulars at once. Address 48H1, Grain Dealers Journal, Chicago.

FOR SALE AT A BARGAIN—CONCRETE and brick elevator and malt house, 150,000 bu. storage capacity, suitable for drying, cleaning and general storage of grain, manufacture of flour, feed or cereal products; transit rates; terms. Write A. J. Pick, West Bend, Wis.

THE BEST WAY to dispose of anything is to advertise it. You may have something to sell or trade which would be of advantage to many who are unaware of the opportunity offered because you are not letting it be known to our subscribers through the columns of this publication.

CENTRAL ILLINOIS elevator, in great ear corn district. Direct eastern and river billing. Equipped with sheller, cleaner, gravity loader, hopper scales, Fairbanks type registering wagon scales. Capacity 25,000 bu. ear corn, 60,000 bu. oats. Steam power. Station handles 400,000 bu. grain. One competitor. Coal sheds, warehouse. Address 48H16, Grain Dealers Journal, Chicago, Ill.

EASTERN KANSAS 6,000 bu. elevator, 6-room residence, garage, hen house, cow barn, 3 hog houses, all on 3 acres private ground. Sale price \$9,000.00. Doing good business in grain and side lines. Would run business for purchaser for 1/3 net profit or salary, or will give possession when desired. Need money or would not sell. Address 48G18, Grain Dealers Journal, Chicago, Ill.

ELEVATORS FOR SALE.

ALMOST NEW 10,000 bu. elevator for sale, on Chicago-Detroit branch of Wabash Ry. For further information write Home Grain Co., La Grange, Ind.

THE WAY inquiries are coming in from my ad may make it necessary to insert another in the Journal stating that the elevator has been sold.—F. C. H.

FOR SALE—A No. 1 elevator at a bargain if taken at once. Track scales. Doing a good coal and feed business. Address 48F1, Grain Dealers Journal, Chicago, Ill.

IOWA—One of the best grain elevators in North Central Iowa for sale; modern equipment, first class condition, and priced to sell. Address 48H12, Grain Dealers Journal, Chicago.

INDIANA—15,000 bu. cribbed elevator, iron clad, on private ground in southern county seat. Good grain, flour and feed business. Address 48C23, Grain Dealers Journal, Chicago.

NORTHEASTERN KANSAS elevator for sale; 15,000 bushel cribbed house on the Santa Fe; no competition; crop prospect 100%. This is a bargain. Address 48J12, Grain Dealers Journal, Chicago, Ill.

MALT HOUSE & ELEVATORS near Milwaukee for sale; capacity 250,000 bushels; Galland and Henning Drum system; good railroad facilities. Can be used for other purposes. Address 48H7, Grain Dealers Journal, Chicago.

INDIANA—10,000 bu. iron clad elevator for sale, in good grain belt, handling all side lines; only elevator in town; good business. New 8-room bungalow, good tenant house, all on private land. Fine location. Address 48J9, Grain Dealers Journal, Chicago, Ill.

CENTRAL IOWA—Six elevators on Chicago, Great Western R. R., handling grain, feed and coal; all modern equipment and in first class condition. The opportunity of a lifetime to purchase an old established and money-making business. Address 48D14, Grain Dealers Journal, Chicago, Ill.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

ILLINOIS 20,000-bu. capacity elevator, located on C., B. & Q. R.R., for sale. Good coal and feed business in connection, with new feed house and coal storage. Elevator in fine condition and equipped with electric power, 2 dumps, 1 scales. Exceptionally fine location. Only elevator in town. Priced right. Address 47S15, Grain Dealers Journal, Chicago, Ill.

OHIO'S BEST AND CLEANEST ELEVATOR. One of the best grain points in the state. Will sell at less than cost of replacement today. 25,000 bushel capacity, steam power. One other elevator in town. Will handle around 150,000 bushels annually. Good side line business. Good, modern town, 3000 population. For further particulars write Box 459, Hicksville, Ohio.

CENTRAL KANSAS—Elevator equipped with modern corn meal and feed grinding machinery, located in a splendid wheat belt. This property is a money maker for any one who can give it his personal attention, but cannot be handled conveniently by the present owner, who is a non-resident. The elevator and mill stands on private property on a railroad spur, and is for sale at a very low price. Address 48G13, Grain Dealers Journal, Chicago.

ELEVATORS FOR SALE.

KANSAS—The following elevators, all located at good grain points, are offered for quick sale:

City.	Capacity.
Cuba	10,000
Brewer	3,000
Bolton	7,000
Clifton	50,000
Climax	15,000
De Soto	8,000
Elk Falls	1,500
Home City	12,000
Homewood	14,000
Jefferson	6,000
Lebo	25,000
Lindsey	10,000
Melvorn	12,000
Minneapolis	10,000
Princeton	14,000
Quenemo	10,000
Sedgwick	20,000
Troy	10,000
Westphalia	2,500
Wilsey	10,000
Mound City (concrete)	14,000
Halls Summit (concrete)	10,000
Thayer (concrete)	10,000
Larned Terminal (concrete)	200,000
Quinter (concrete)	100,000

The last 4 are unfinished.

MILLS

Morganville—3 elevators, 80,000 cap.; 150 bbls. Kingman—elevator, 30,000 cap.; 200 bbls.

For further information address

J. N. Dolley, Receiver,
Associated Mill & Elevator Company,
1010 New York Life Building,
Kansas City, Missouri.

ELEVATOR FOR SALE OR RENT.

MINNESOTA elevator of 25,000 bushels capacity for sale or rent. Located on C. M. & St. P. Ry. Coal and Feed business in connection. Address J. J. Dobie, Mapleton, Minn.

FOR SALE OR EXCHANGE.

HAVE four modern elevators in irrigated district of Wyoming. Will sell or trade for elevators in Central Nebraska. Address Box 597, Cheyenne, Wyo.

ELEVATORS WANTED.

WILL TRADE half section eastern Colorado land for an elevator. Box 37, Oxford, Neb.

WANTED—Elevators at good grain points; will take side lines also. Address E. W. Davis, 513 N. Seminary st., Galesburg, Ill.

MILL FOR SALE.

MODERN 100-BARREL MILL for sale; large territory, Rocky Mountain section; plenty of wheat. Feed mill in connection. Cheap power. Address 48B4, Grain Dealers Journal, Chicago.

PARTNER WANTED.

EVERY ADVERTISER who has once used our columns invariably finds our pages then and at a later date of service.

TO TAKE one-third interest in established grain and coal business. Two good elevators doing big business in grain and side lines. Prefer man who can assist in management of the business or handle books. Answer if you have \$10,000 to invest. Address 48F22, Grain Dealers Journal, Chicago, Ill.

ELEVATOR BROKERS.

JOHN A. RICE **ELMER N. SMITH**
Elevator Brokers, Frankfort, Indiana.

ELEVATORS AND FLOUR MILLS
Bought and Sold
Paul Plotz & Co.
70 W. Monroe St., Chicago, Ill.

ALWAYS HAVE ELEVATORS For Sale in the Grain Belt of Illinois and Eastern Indiana. If you are in the market write me fully and I will try to satisfy you.

JAMES M. MAGUIRE,
432 Postal Tel. Bldg., Chicago, Ill.

CLAYBAUGH-McCOMAS
Offices

Frankfort, Ind. Indianapolis, Ind.
23 B. of T. Bldg. 601 Board of Trade.
If you want to sell or trade an elevator write us at either address.

BUSINESS OPPORTUNITIES.

FOR EXCHANGE—Fine quarter Brookings County, So. Dak., land. What have you?
Geo. O. Strom, Sac City, Iowa.

FOR SALE—On account of bad health I am offering for sale my half interest in the T. E. Frantz Grain & Coal Co.'s business at Frankfort, Ind. Party buying can take over the management. T. E. Frantz, Frankfort, Ind.

EWEN, MICHIGAN—We are anxious to have a good company locate here and build a warehouse to buy up farm products. This is a growing farming community and a good company would make a success. Harry Hanlin, Ewen Development Ass'n.

FOR SALE—A good proposition for \$10,000.00 at Missouri Valley terminal, including Board of Trade membership, nice commission business and country interests with prospects of good business and crops in territory adjacent. Address 48J23, Grain Dealers Journal, Chicago.

A REAL BARGAIN—Two complete grain elevators and feed mixing plants, molasses feed units, chicken feed units, hay grinding plant, chop mills, oat crimpers, etc., for sale. Will sell on easy terms. Plants located in best grain centers in the South. For particulars write to Kaucher, Hodges & Co., Memphis, Tenn.

BUSINESS OPPORTUNITY WANTED.

WILL BUY part interest in good, going grain concern, preferably in the Northwest. Address 48J11, Grain Dealers Journal, Chicago.

RADIO EQUIPMENT.

BUILD YOUR OWN RADIOPHONE!

Anyone can do it with our Blue Prints and detailed written instructions which show how to build an excellent Radio Receiver and Two Stage Amplifier. Price \$1.35. Order today. Satisfaction guaranteed.

Radio Mail Order House,
Dealers in Radio Equipment,
De Kalb, Ill.

MACHINES FOR SALE.

BOSS CAR LOADER for sale; one No. 8. Address A. H. Richner, Crawfordsville, Ind.

WRITE ME for prices on used Midgets. All kinds new and used mill and elevator machinery. H. C. Davis, Bonner Springs, Kansas.

SEPARATOR—Howes Eureka Dustless, No. 196; used only 2 years and in perfect order. Price \$100.00. A. Walton, Columbia, Va.

PULLEYS—1,000—for sale. ALL sizes, solid cast iron, wood and steel split. Standard Mill Supply Co., Kansas City, Mo.

DURABLE WIRE ROPE for sale, for car shovels; cast or plow steel. Manila rope, buckets and everything in elevator supplies.

PROTECT YOUR ENGINE.

Does the water from your pump and cooling system automatically drain back into your cistern? Then you owe it to yourself to learn how before you are forced to buy a new engine. Write N. O. Secret, Box 9, Grain Dealers Journal, Chicago.

MACHINERY BARGAINS.

Among the items of used machinery that we have in stock are the following:

1 Kennedy Wheat Heater.
1 Prinz Rau Oat Separator.

Write us for prices on used machinery and equipment. L. R. Veatch, 418 Prudential Bldg., Buffalo, New York.

REAL BARGAINS.

Prompt Attention. Quick Shipments.

When in need of elevator or mill machinery, notify us. We are headquarters for power and transmission equipment, and have on hand several well-known makes of motors, boilers, engines, etc.

Send us list of all your wants. We can supply you with full line of machinery for elevators, flour, corn and cereal mills. Complete equipments for modern mills of all kinds, molasses, stock, and poultry feed plants, plans, specifications, flow sheets, etc., our specialty. Write us without delay.

Geo. J. Noth, Mgr.,
9 S. Clinton St. Chicago, Ill.

MACHINES WANTED.

WE ARE IN THE MARKET for a complete outfit to equip a small country elevator, 20 h.p. gas or oil engine. Address 48J16, Grain Dealers Journal, Chicago, Ill.

SECOND HAND MACHINERY WANTED.

3—60 bu. hopper scales.
1—14x7 wagon scale.
2—60 ft. elevators with 8x5 cups, iron pulleys, adjustable boot.
1—60 ft. elevator with 7x4½ bucket.
2—40 ft. elevators with 8x5 bucket.
All must be in good serviceable condition. Give prices. State where located.
A. L. Chamberlain, Port Huron, Mich.

SCALES FOR SALE.

WAGON scales, also **KLINGLER** Automatic. Address Box 106, Sioux Falls, S. D.

FAIRBANKS Hopper Scale for sale; 40,000 lbs. capacity. Oxford Farmers Exch., Oxford, Nebraska.

CHEAP FOR QUICK SALE—Fairbanks Registering Beam 100 ton R. R. scale, in good condition. Conover Grain Co., Conover, Ohio.

AUTO TRUCK SCALES.

One pair Fairbanks 10-ton auto truck scales; used one year; good as new. H. H. Spangler, Pickerington, Ohio.

One 4-bu. Richardson with Residue Weigher.
One 1-bu. Sonander Mill Scale.
Federal Scale & Supply Co.,
208 South Fourth St. St. Louis, Mo.

FAIRBANKS 50 ft., 5 section, 100 ton track scale for sale; nearly new. For further particulars write Wayne Grain Co., 630 Globe Bldg., St. Paul, Minn.

Midget Marvel Mills FOR SALE

Used twenty-five and fifty barrel Midget Mills with Engines, Cleaning Machinery, Packers, Bleachers, Elevator Legs.

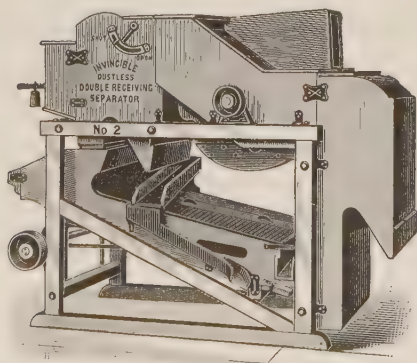
All kinds of used Corn Mill Machinery, Feed Grinders, Wagon Scales, in fact everything in the Mill and Elevator Machinery line, in stock at Oklahoma City, at attractive prices and terms.

W. L. HUTCHESON
510 Grain Exchange Bldg.,
Oklahoma City, Oklahoma

CONTENTMENT—Plus

That is an experience users of Invincible Separators enjoy.

It is human nature to hate to admit having made a mistake. Ask the operator of any number of makes of separators on the market. He will say his machine is all right—but—



An INVINCIBLE user never has to Qualify his answer with excuses for mechanical shortcomings. No, never.

Take special note of his praise of its efficiency.

He is Contented—PLUS. Join him.

THE INVINCIBLE GRAIN CLEANER CO.

SILVER CREEK, N. Y.

Representatives:

F. J. Murphy, 211 Postal Bldg., Kansas City, Mo.
H. C. Purvine, 111 East 5th St., Bristol, Tenn.
Bert Easley, P. O. Box 363, Fremont, Ohio
C. L. Hogle, 30 S. Arlington St., Indianapolis, Ind.
C. Wilkinson, 6027 Chestnut St., Philadelphia, Pa.
F. H. Morley, Webster Bldg., Chicago, Ill.
Strong-Scott Mfg. Company, Minneapolis, Minn.
Berger & Carter, 17th & Mississippi Sts., San Francisco, Calif.
Grain Cleaners Limited, 75 Mark Lane, London, Eng.

BROKERAGE ACCOUNTS WANTED.

WANT SOME FLOUR AND FEED ACCOUNTS, Also Grain and Grain Products Accounts of merit and competitive prices, on salary or commission basis. Also merchandise brokerage accounts. Desire such accounts as will prove permanent. Edwin Fore. Texarkana, Ark.-Tex.

LUMBER FOR SALE.

On wrecking our frame elevator, will have some choice timbers 12x12 and smaller of good lengths for sale. Immediate shipment. Walnut Creek Milling Co., Great Bend, Kans.

ENGINES AND BOILERS.

BARGAIN FOR QUICK SALE.

One 65 h. p. Center Crank Steam Engine with 80 h. p. High Pressure Boiler (new). Also Double Cylinder Snow Pump and all pipe connections, in first class condition. Write Farmers Union Co-op. Ass'n, Maple Hill, Kansas.

Good high speed 20 h.p. engine. Good 25 h.p. tubular boiler, full front, complete with stack, injector, gauge, etc. All in good running order. In use every day. We offer this at \$250.00 f. o. b. cars. Will take a good 25 h.p. 3 phase, 60 cycle 220 volt motor in exchange.

Goodrich Bros. Hay & Grain Co., Winchester, Ind.

DYNAMOS—MOTORS.

DYNAMOS AND MOTORS WANTED—Buyers of this equipment are reached in largest numbers and at the least expense through the use of the "DYNAMOS-MOTORS" columns of the Grain Dealers Journal,—the medium for power bargains.

BAGS—BAGGING—BURLAP.

THE SMALL EXPENSE incurred through the placing of an advertisement in the Grain Dealers Journal is more than compensated for by the results obtained.

BURLAP BAGS OF EVERY KIND FOR SALE; new or second-hand, plain or printed with your brand; seamless Cotton Grain Bags; Sample Bags; Burlap, Cotton Sheeting or Paper for Car Lining, etc. Wanted: Second-hand bags, best prices paid. WM. ROSS & CO., 409 N. Peoria St., Chicago.

WOOL WANTED

By

**Kraus
and Apfelbaum**
FORT WAYNE, IND.

We Want Your Wool
Get In Touch With Us

We pay the highest market
prices

Long Distance Phones 4460-4461

BARGAIN SALE ON SHELF-WORN BOOKS.

These books are slightly soiled and shelf worn. To clear out these books promptly we are offering them at greatly reduced prices.

One No. 4, Grain Storage Receipts. This book contains 47 blanks for storing grain and 47 stubs for recording the amount stored. Order Form 04. Price 35 cents.

One No. 88, Certificate of Weight. This book contains 75 certificates of weight in duplicate, to be filled out and sent with bill of lading, or along with claim for loss. Book is worn. Order Form 888. Price 50 cents.

One No. 10DC, Duplicating Contract Book, containing 76 contracts in duplicate, printed on bond paper and bound in heavy pressboard. Had been used as sample and covers are soiled. Order Form 100DC. Price 60 cents.

Three No. 411A—Railroad Claim Blanks. for Loss of Weight in Transit. These books contain 100 blanks in duplicate, with 4 sheets of carbon paper bound in back. Corners of each book slightly bent. Order Form 4112-A. Price each \$1.50.

Two Grain Shipper and the Law, a book of decisions of the State, Supreme and Federal Courts, covering shipper's contracts and his relations with the carrier. Soiled from being used as sample. Order Form Grain Shipper S. W. Price \$1.00 each.

Two No. 7AW, Affidavit of Weight Blanks. This form is made up in books of 50 blanks. Each blank contains the necessary information to make affidavit of weight of grain loaded into car, and has space at bottom for notary's seal. Order Form 77AW. Price 50 cents each.

Two Universal Grain Codes, shelf worn from being used as samples. They are slightly soiled. Leather bound, containing 13,745 code words as well as the latest supplement for U. S. Standards for wheat, corn and oats. Order "Bargain Universal." Price while they last, \$2.00 per copy.

Five Clark's Decimal Grain Values. Contains four sets of tables: corn, rye and flaxseed values, 56 lbs.; wheat, clover and pea values, 60 lbs.; barley and buckwheat values, 48 lbs.; oats values, 32 lbs. Book contains 96 pages, printed on 80-lb. book paper, bound in art canvas. Binding slightly soiled. Order 35 Bargain. Price \$3.50 each.

Three No. 6CB, Purchase and Sale Confirmation Blanks. These books contain 50 confirmation blanks in triplicate and three sheets of dual faced carbon. Fill in all particulars of your agreement, send two copies of it to the other party. He signs and returns one and keeps the other, thus having a perfect understanding regarding the deal. These books are shelf worn from being used as samples. Order Form 06CB. Price 50 cents each.

All prices are f. o. b. Chicago and good while supply lasts.

GRAIN DEALERS JOURNAL,
305 So. LaSalle St., Chicago, Ill.

OFFICE APPLIANCES.

SAFES—Large stock of new and used safes on hand. Protect your valuable papers. Prices reasonable. The Howe Scale Co. of Ill., 512-514 St. Charles St., St. Louis, Mo.

HELP WANTED.

AN ALL AROUND ELEVATOR MAN with a will to work to his employer's interest, who knows elevator machinery thoroughly, including steam and gasoline power, who has the intelligence and initiative to install improvements, can secure permanent employment with an Illinois grain firm. State salary wanted. Address 48H15, Grain Dealers Journal, Chicago.

SITUATIONS WANTED.

WANT position as mgr. of grain elevator; 15 years' experience; prefer Central or Eastern Kansas. Address Box 7, Lorraine, Kans.

WANTED for the coming season—Position as grain buyer or manager in country elevator. Good references and experience. Box 17, Tate, Sask., Canada.

MILLER wants position any time from June 1st to August 1st; 15 years' experience; can give best reference. Address 48G9, Grain Dealers Journal, Chicago, Ill.

MANAGER with 10 years' experience in grain, lumber, coal and hardware desires position with Farmers Elevator. Address 48H17, Grain Dealers Journal, Chicago, Ill.

POSITION AS MGR. of farmers or independent elevator wanted; 5 years' exp. in handling grain, feed, seed and hay; must be good grain station; A1 references furnished. Employed now and giving satisfaction, but wish to make change. Northwest territory preferred. Address 48J10, Grain Dealers Journal, Chicago.

I HAVE had a broad experience in the grain business. Operated a country station for 10 years and made it show a nice profit, and have had 5 years' experience in terminal markets. If you want a man to manage your elevator and make you money, write me and I will talk it over with you. Best references. Address 48F17, Grain Dealers Journal, Chicago, Ill.

AM SEEKING connection with a reputable firm; have had years of experience in cash and future grain branch offices; thoroughly acquainted with telegraph end; excellent all around business knowledge and experience; married; age 38. Now located in Illinois, but will go anywhere. Can make quick change. Address 48J7, Grain Dealers Journal, Chicago.

WANTED—Position as mgr. of Mill & Elevator, with people who will appreciate ability. Married; 34 years old, and not afraid of work; will guarantee to get results if conditions of the business are at all favorable. Will take an interest in a good concern that has possibilities. Would like location in good school town, in Southwest preferred. Address 48J26, Grain Dealers Journal, Chicago, Ill.

FLOUR FOR SALE.

MIXED CARS of flour and mill feeds in 100 pound sacks are our specialties. We are now manufacturing a full line of corn goods, cracked corn, feed meal, corn and oats chop, Ohio Farm feed, shelled corn and standard oats in connection with our flouring mill. Would like to send you a trial to convince you of the superiority of our products. Ansted & Burk Co., Springfield, Ohio.

NEW WAY

Use the 1921 Model

EDGAR STEEL SEALS

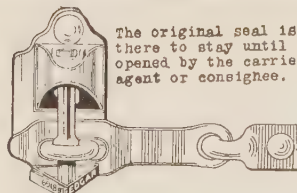
When Shipping Carloads of

Grain, Flour, Steel, Everything

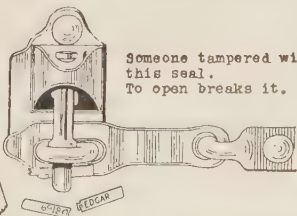
Anything where a part can be taken out. Save the loss. Prevent the necessity of claims by eliminating the temptation to cover up theft.

Send full shipments and know they will get there

The Edgar Steel Seal & Mfg. Company
LAWRENCE, KANSAS



The original seal is there to stay until opened by the carrier's agent or consignee.



Someone tampered with this seal. To open breaks it.

SEEDS FOR SALE—WANTED

Field and Grass
Seed Trade Directory

ARNHEM, HOLLAND.

Wm. E. Busgers & Co., European fancy natural gr. sd.

ATCHISON, KANS.

Manglesdorf Seed Co., The, wholesale seeds.

BALTIMORE, MD.

Wm. G. Scarlett & Co., wholesale seed merchants.

BUFFALO, N. Y.

Stanford Seed Co., Inc., The, wholesale field seeds
Whitney-Eckstein Seed Co., wholesale seeds.

CHICAGO, ILL.

Dickinson Co., The, Albert, seeds.
Illinois Seed Co., The, grass and field seeds.

CINCINNATI, OHIO.

McCullough's Sons, The J. M., field and garden seeds

CONCORDIA, KANS.

Bowman Bros. Seed Co., field seeds.

COUNCIL BLUFFS, IOWA.

Ouren Seed Co., wholesale seeds and grain.

CRAWFORDSVILLE, IND.

Crabbs Reynolds Taylor Co., grass and field seeds.
Crawfordsville Seed Co., seed merchants.

ELKHART, KANS.

Muncy & Carson, grain and seeds.

KANSAS CITY, MO.

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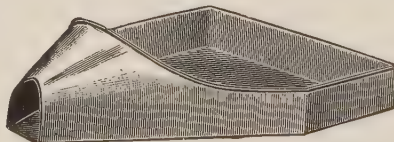
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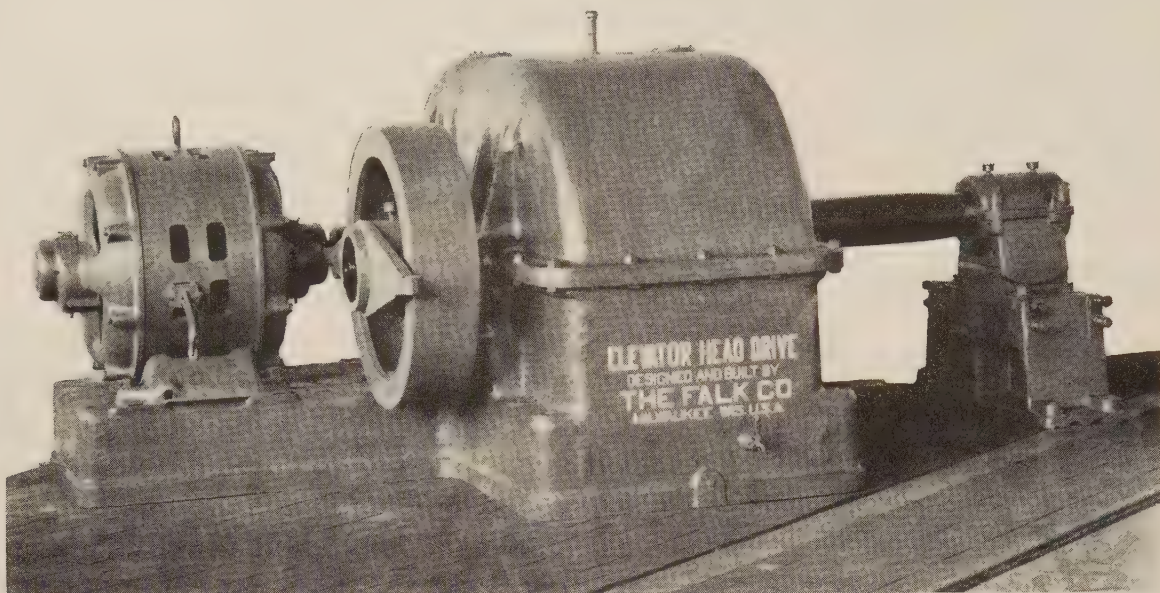
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Published on the 10th and 25th of each month in the interests of better business methods and improved handling facilities for progressive wholesale dealers in grain and field seeds.

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THE ADVERTISING value of the Grain Dealers Journal as a medium for reaching progressive grain dealers and elevator men is unquestioned. The character and number of advertisements in each number tell of its worth. If you would be classed with the leading firms catering to the wholesale grain trade, place your announcements in the Journal.

Advertisements of meritorious grain elevator machinery and supplies and of responsible firms who seek to serve grain dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain trade, news items, reports on crops, grain movement, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. Address "Asked-Answered" department. The service is free.

CHICAGO, MAY 10, 1922

DO NOT delay needed improvements in your elevator. The farmers will soon be starting a new crop for your house.

THE FARMERS of the land are doing their level best to produce bountiful crops of grain this season, so it is up to the elevator operators to place their houses in condition to handle it promptly and efficiently.

FLAT BOTTOM BINS so greatly increase the cost of operating a grain handling plant that no one should tolerate them. Not only do they promote mixing of the different grades and kinds of grain, but they provide a convenient catch-all for broken grain and dirt which will furnish a safe retreat, a breeding place for weevil and moths. A self-cleaning bin not only effects a material reduction in the cost of handling grain, but it makes for speed, cleanliness and a reduced cost of operation.

ELEVATOR operators who do not believe in equipping their plants with modern dust collecting apparatus and using it all the time will be cheered to learn that the damage to grain in the working house by fire following the dust explosion in the Murray Elevator at Kansas City was only 15%, with an insurance of \$390,000, while the fire damage to the grain in the adjoining concrete storage tanks was 1%; insurance \$760,000. The insurance companies may help property owners to pass part of their losses onto others, but the time is near when they will decline to insure the man who neglects or refuses to exercise every precaution against fire and dust explosions.

SO MANY fires start in grain offices and burn the elevator, the rules of discretion should forbid any office being built nearer than 75 feet from the elevator.

CHEAP MACHINERY which cannot be depended upon to give the service needed when the grain is moving in volume is seldom an economical investment for any grain dealer who has much grain to handle.

MINNEAPOLIS is happy in the idea that three new barge lines will engage in business this season and attempt to make the flour city their Northern terminus. Water transportation should pay better now than ever, because the freight rates are so high. All barge lines should find it easy to obtain plenty of shipments to keep them busy.

FREE SEEDS are still with us. At the last minute the few senators who had developed a little backbone and had at first refused to vote \$360,000 for the free seed graft surrendered to the demands of the members of the lower house and once again thrust upon the long suffering public this annual flood of trash and dirt which is sold to the government in envelopes to be broadcasted throughout the land to the innocent. When, Oh when, will some Congressman develop enough courage to knock out this old useless graft?

AUTOMATIC takeup boxes in grain elevator legs provide such an easy manner of accurately adjusting rubber belts it would seem that no grain dealer with foresight would hear to the installation of legs without them. Rubber belts will stretch from a change in temperature and from usage, and changing their lengths, even but a few times, will incur a much greater cost than the initial installation of the automatic takeup box, which will always keep belts in adjustment and reduce the wear and tear on the buckets and belt as well as on the leg casing.

MORE TERMINAL, TRANSFER and storage elevators are being planned and contracted for today than for many years, which shows conclusively that the terminal market operators have full confidence in the future of the grain trade and propose to provide modern, up-to-the-minute facilities for the rapid handling and safe storage of the golden products of our fields. Every day brings to light some new project in terminal market facilities and if we could but obtain a reasonable reduction in freight rates a great many more improvements in grain handling plants would no doubt be made.

WHEN placing a new roof on your old elevator, or for that matter on any grain handling plant which is close to the railroad, with its sparking locomotives, keep in mind the danger from fire on the hot days next summer when wood shingles curl up and catch every spark which comes within a yard of them. The insurance companies offer a reduction from the basis rate of 50 cents per hundred for roofs of fire resistive material. Inasmuch as this affects the insurance cost on your entire plant as well as its contents, it is easy to perceive that wood shingles are far too expensive to be tolerated.

FARMERS object to waiting in line all day for a chance to unload their grain into your receiving sink, and some of them will drive to the other house. A large double sink and a fast leg will prove a profitable investment and save you much worry on busy days.

ELEVATOR HEADS which spill large quantities of grain down the back leg are surely not an economical investment. Either the speed or size of the head pulley is wrong or else the head casing does not permit of the proper delivery of grain to insure its getting to the distributing spout. Throwing grain down the back leg only helps to wear out the grain and increase the cost of elevating the grain to your bins. Better investigate the delivery of your elevator heads now, while you have the time.

BLACK STEM RUST has caused such large losses to wheat growers of the spring wheat territory during recent years that all interested are now waging a vigorous warfare on the common barberry. With the campaign being conducted by private enterprises and the different states, supplemented by the U. S. Dept. of Agriculture, the offending barberry should soon disappear and the disease disappear from the wheat fields for lack of a winter harbor. All authorities seem to agree that ly eradicated, black stem rust will disappear.

THE DISASTROUS dust explosions occurring in grain handling plants during recent years have resulted in much careful investigation and thoughtful experimentation in the hope of reducing this dangerous hazard. Many engineers who have long devoted much time to the study of the handling of light material are perfecting improved facilities for collecting and removing this dangerous dust; so that the time is near at hand when grain cleaning elevators will no longer be classified with powder mills and gun cotton factories.

WHEN PLANNING the desirable improvements in your grain handling facilities do not expect to be satisfied with any cheap substitute for what you really need. Substantial improvements are not only the most durable and the cheapest in the long run, but they are the only kind that are always satisfactory. Last year's declining market may have given you visions of the poor house, but that will not excuse your greasing the road to that retreat with cheap substitutes for the real improvements needed in your plant.

DUST AND DIRT have been the primary causes of the wrecking of so many elevators during recent years it would seem the part of caution to remove all such foreign matter at the first practical point. Few country elevators are built without a dust house, and many are now being equipped with exhaust fans on elevator heads, which remove most of the impalpable powder from the grain and throw it outside the cupola, thereby making the top of the elevator less forbidding to operators and more inviting to inspectors. Grain dust not only causes powerful explosions, but it contributes largely to an unnecessary increase in the fire hazards of every grain handling plant as well as a reduction in the grade of the grain with which it is mixed.

FIREPROOF elevators may not burn but grain will burn in a fireproof elevator as was the case following the dust explosion in the reinforced concrete elevator of the C. & N. Ry. in South Chicago. It is always safe and generally cheaper to keep grain insured against fire regardless of the building containing it.

WIRE NAILS, as is clearly pointed out by Mr. Johnson in his able address published elsewhere in this number, are not a safe substitute for fuses. If you are using electric power or illumination, insist upon fuses being installed and kept in use which will protect your circuits against an overload. Otherwise the fire fiend may put you out of business.

GRAIN DEALERS do not object to paying a reasonable fee for grain inspection and weighing, but they do seriously object to paying a fee so large that the departments collecting the money will be able to turn over a large surplus to the general fund of the State treasury. No state engaged in the grading and weighing of grain should reap a profit from the operations of the departments, but it seems that the Missouri department has earned a large surplus and turned it into the general fund. Shippers generally will join with the trade ass'ns in condemning these extortionate fees and demanding a reduction to a figure more in keeping with the actual expenses of the departments.

ELECTRIC POWER is gaining many new friends among the grain elevator operators of the country, so that they are hastily installing elevators without giving any thought to the hazards they are adding to their plants. Two excellent articles in this number should help all to a clear understanding of what is best adapted to the needs of the grain elevator and also how electric power can be installed without greatly increasing the fire hazards, as well as the cost of insurance. It might be well for each elevator operator to consult with the insurance inspectors and with the Mutual Fire Prevention Bureau before starting to make their alterations preparatory to new installations. In this way a change could be effected without working an increase in the cost of insurance.

CLEAN GRAIN always commands the better price in every market. Dirty grain is never sought by any dealer other than a professional mixer. Elevator operators have daily proof of these facts, so it is easy for them to realize the advantage of equipping their grain handling plants with first class cleaning machinery, which will enable them to remove all dust, dirt and foreign matter and offer clean grain to their prospective patrons. So long as country elevator men accept dirt from farmers and pay for it at grain prices they must expect threshermen to persist in filling the farmers' bags with this refuse, because they are paid for their work on the bushel basis and the farmer is encouraged to increase the number of bushels by the slack methods of the country buyer. When every country elevator operator removes this refuse and returns it to the farmer he will insist upon Mr. Thresherman removing it in order to reduce his threshing bill.

PULLEYS OR SHAFTING which are not running true are very likely to crowd your belts over to one side or the other, resulting in wearing, fraying at the edges, and friction. The time to eliminate these unnecessary fire hazards is before the farmers start hauling new grain to your house. Don't procrastinate. Get busy *now*.

LEG CASINGS of wood or any material which provides splinters or ledges upon which dust, dirt and strings can lodge should not be tolerated, as this refuse greatly increases the fire hazard of the entire plant and also provides a convenient hiding place for weevil. It is not a difficult matter to provide leg casings which will keep clean. However, the safety of every plant would be promoted by the occasional inspection of the interior of all leg casings as well as a careful inspection of the clearance afforded the buckets. If either the buckets or the belt scrapes or rubs the casing the fire hazard is increased and the power wantonly wasted. By correcting such troubles you can greatly increase the efficiency of your entire plant.

SAD TO RELATE, we have recently learned of two contracts being let, in different states, for grain handling plants from meager plans and specifications and in each case the contractor was employed only to erect the building—provide the walls. The elevator owner, hoping to reduce the cost of his plant, is planning to buy his own machinery and install it after the builder has left for other parts. His grief will offset tenfold any real or imaginary saving he may effect. If the builder has had sufficient experience in the designing and building of grain elevators to justify his employment in any capacity, then wisdom would dictate that his services be retained until the plant is complete and in operation. Half-way jobs or contracts which overlap increase the difficulty of placing the responsibility for failures and disappointments. It is far more satisfactory and generally far cheaper to have one firm responsible for the completed plant.

SHIPPERS' drafts have been bearing 7 per cent interest long enough and it is time the rate was deflated on this prime security as it has been on government obligations. At markets where the local bankers are oblivious to the trend of the times the grain receivers should call their attention to the practice at such leading markets as Chicago and Kansas City, where the rate officially charged grain shippers is down to 6 per cent. If the government can borrow money at 3½ per cent the grain receiver ought to get it from his banker at 5½ to 6 per cent for the benefit of his country shippers, especially since the official rate charged shippers before the war and even in 1916 was only 5 per cent. Any shipper who is being taxed 7 per cent should take up with his local banker the possibility of getting cheaper money at home, in view of the fact that some country banks are sending their surplus funds to the city banks to earn a very low rate on balances while the same city bank is charging the grain receiver 7 per cent, perhaps on a shipment of grain originating at the very town sending the cheap money to the city.

THE UNSAFE manlift is the most dangerous machine about the elevator and should quickly be displaced by the most reliable obtainable.

Your New Elevator

Concrete elevators are generally supposed to be preferable, but some of them are surely not desirable at any price. Elsewhere in this number is published an illustrated description of another concrete failure. The photographs give ample evidence of the ignorance of the designer and builder of what is necessary to safely store grain in bulk. Grain dealers throughout the land have paid a distressing penalty for the privilege of letting the contractor for their new concrete house to the inexperienced, and no doubt others with an economical ambition will suffer in the same way.

It has not been long since we illustrated a new concrete elevator of small dimensions which had its bin bottoms 24 feet from the floor of the first story and before the house was in condition to receive grain it was necessary to cut through the walls in three different places. Of course, the engineer (?) knew all about building grain elevators although this was his first attempt. The buyers were good fellows and paid the bill, and sad to relate, they will continue to be handicapped by this monstrosity so long as they attempt to operate it. It is not necessary to prop grain bins way up into the air in order to hasten the delivery of grain to cars. A modern elevator leg will accomplish this purpose quickly and with less expense, then more of the space enclosed in the heavy walls of the plant can be safely used for storage.

If you have not positive knowledge of the ability of the contractor with whom you are figuring for your new plant, to design and erect a grain elevator that will be conveniently arranged and properly equipped, then look about you and find one who can exhibit convincing evidence of his skill. The repairing of some concrete elevators so as to make them usable has proved so expensive as to be prohibitive and the unsafe plants stand idle, a monument to the parsimony of the grain dealer who did not stop to look and investigate before letting his contract.

The grain trade is fortunate in being served by a large number of competent contractors who have long specialized in the designing and building of grain handling plants along lines which have proved to be the most efficient for bulk handling, so there is no excuse for any grain dealer who can read, in trusting his future success to the mercies of a barn builder or a silo contractor. The only claims this class of builders ever advanced in support of their demands for consideration were that they would do it "Cheaper, Cheaper, Cheaper," but none have ever been frank enough or honest enough to tell their prospective victim that the product would be cheaper, maybe far cheaper than he would desire to have.

If you want a good elevator and if you have sufficient business to justify the building of any elevator, get one that will facilitate the rapid handling of grain with safety and convenience.

Freight Rates Must Be Reduced

Persistent demands from all quarters and convincing facts from students of agricultural marketing problems support the pressing need for reduced freight rates on agricultural products in order that the farmers of remote regions may market their products without mortgaging their farms to pay the balance on the cost of transportation.

The demand for such reduction is so urgent that it would seem right and proper that every grain dealer should go out of his way to help bring about the needed reduction of freight rates and railroad wages. First of all, the Adamson law should be repealed summarily and the Railroad Labor Board abolished so that the transportation companies can go into the open market and employ labor in competition with other industries and at like rates for the same class of labor.

The joint Congressional Commission of Agricultural Inquiry which has made an exhaustive investigation of agricultural problems has joined in the demand for freight rate reductions and the Secretary of Agriculture, in a recent address, stated that the blighting effect upon agriculture of the existing high freight rates can hardly be comprehended. He insists that the continuation of the present high rates serves as a discrimination in favor of the farmers of competing export countries. He has pointed out that the present freight rates help to keep up the cost of dairy products to all Eastern consumers, and thereby presses Eastern industries Westward, nearer the source of food supply.

Another point scored by the secretary meriting careful consideration of the grain elevator operator is that the low net returns to the producers of agriculture products as the result of high transportation costs unnecessarily prolongs the period of dissatisfaction among the farmers of the West and thereby aids and assists the unprincipled advocates of economic heresies with which the country has been flooded since the war closed.

Better net returns to the farmer is sure to reduce the dissatisfaction and discontent among the agricultural producers. Grain dealers everywhere can promote their own interests and help best friends by working for, talking for, writing for wage and freight rate reduction on the railroads. Help the farmer get something for what he produces.

Building Material Prices.

The outstanding condition in the market for materials of construction has not been any sharp advance in prices. Rather the change in the situation has taken the form of an increased demand which has swelled the volume of sales to more nearly an approximation of the producing capacity.

In the southern pine industry the demand has been accentuated on the opening of the spring building season, as might have been expected, the orders reported by the statistician of the American Wholesale Lumber Ass'n being 44 per cent above production, while shipments were 16 per cent over production.

Prices naturally are somewhat firmer, shingles being 15 to 25 cents higher, and all the shingle mills have been placed in operation. The productive capacity of the country was so stimulated by the war, however, that even with the increased demand for all varieties

of lumber only 85 per cent of the productive capacity is in operation.

Owners who contemplate building grain elevators, on the whole, have a favorable price basis to work upon. Compared with the peak of high prices reached in the summer of 1920 building materials are very low at present. Common southern pine boards in lengths from 8 to 20 ft., 1x6, are quoted at \$31.50 for No. 1, \$21 for No. 2 and \$14 for No. 3, per thousand feet board measure f. o. b. mill. No. 1 common dimension lumber smooth on one side and edge in 16-ft. lengths is quoted at \$25.50 for 2x4; \$21 for 2x6; \$24 for 2x8; \$25 for 2x10; and \$27 for 2x12.

Structural timber, 3x8 to 8x8, is quoted at \$20 in lengths of 10 to 20 ft., per thousand feet, f. o. b. mill, the select structural grade costing \$15 more. The freight on structural timber from the mill is \$14.40 to St. Louis, \$19.80 to Chicago; \$20 to Cincinnati; and \$17.55 to Kansas City.

Portland cement is quoted at Chicago, which is the lowest market at \$1.97 per barrel in carloads, plus 40 cents for cloth bags, or 15 cents per barrel for paper bags. At St. Louis the price is \$2.10. Crushed stone is worth \$2 per cubic yard, and sand and gravel the same.

Liability for Grain Deteriorating in Transit.

L. Villegas & Co., Laredo, Tex., bought a car of No. 3 sacked corn at \$2.62½ per bushel thru the Border Wholesale Commission Co., from the Clement Grain Co., of Waco. The Clement Grain Co. bought two cars of bulk corn at Kansas City, had it shipped to Waco and placed in sacks, but it was in transit some 12 days in a tight box car and the heat damaged some of the sacks.

Villegas & Co. paid the draft, and after unloading 433 sacks discovered the corn was not up to sample, and demanded the return of the money. The Clement Grain Co. wired to unload the corn and buyer would be protected. Several other cars of corn were sold, but the corn went out of condition or the market declined.

Villegas paid \$348.81 to have one of the cars of corn screened, and brought suit against the Clement Grain Co. and the Border Wholesale Commission Co. to recover damages.

Trial was before a jury, and the court instructed the jury to return a verdict against L. Villegas & Co., as to the defendant, Clement Grain Co., and against the Border Wholesale Commission Co., in favor of L. Villegas & Co., for the sum of \$2,744.68, and the verdict was as instructed; and the verdict was, further, that the Border Wholesale Commission Co. have and recover of and from the Clement Grain Co. the sum of \$1,332.56. The Clement Grain Co. took an appeal, but the judgment was affirmed by the Court of Civil Appeals of Texas.

The Court said: The rule requiring a buyer, in possession of goods that he refuses to pay for, to take proper care thereof to minimize damages until seller can repossess himself, or upon his refusal to do so until they may be sold, is not applicable where the seller comes on the ground to handle them himself, and to whom they are tendered and received, and, as in this case, left in the possession of the buyer, and the seller cannot be heard to say the tender and delivery to him was not complete, and deny to the purchaser the right to recover the invoice price paid through mistake. So where the undisputed evidence showed that appellant agreed to take the corn off the buyer's hands, after notice, at the place of delivery, the buyer can no longer be held for the care or disposition of the goods, and the charges raising such issues would have been misleading and erroneous.

Appellee had the right to reject the last two cars of corn because the time had expired in which to ship the corn. This was undisputed. The right in such cases to countermand the order in the absence of any other fact becomes a matter of law; hence there was no issue to be submitted to the jury. The written contract provided that the shipment was to be made within 10 and 15 days respectively from their dates, and the evidence is undisputed that the time had passed. Even more so would it be true where the market is

declining, as shown in this case. The date of the contract was March 15, 1918. The contract reads: "Time of shipment—one car within 10 days one car within 15 days." It was countermanded April 3 to 4, 1918. The order was not countermanded until 8 days after one car should have been shipped and 4 or 5 days after the other should have been shipped. No excuse was shown therefor, or waiver alleged. It has been held in mercantile contracts, time being essential the buyer may refuse the goods, even though the delay be very trifling. It was shown corn had declined and was declining, and that appellant knew appellees were brokers. To have taken the corn after that time would have caused an injustice to appellee which the delay of appellant caused.

Five cars of corn were involved in this suit. The first car was the one shipped to Villegas & Co., and under the undisputed evidence appellant was liable for the damages. The second and third were shipped to Laredo, rejected by appellee, and sold by appellant at Blessing, as to which the trial court instructed the jury that, if they found that the cars arrived at Laredo in good condition and were allowed to remain on the tracks unopened by appellee, the latter would be responsible to appellant for all damages resulting therefrom. The jury found in favor of appellant on one of these cars, but made no mention of the other, but appellant makes no complaint of the finding of the jury.—237 S. W. Rep. 596.

Panhandle Grain Dealers Meet At Amarillo

Amarillo, Tex., May 9.—(Special telegram) —The seventh annual meeting of the Panhandle Grain Dealers Ass'n was called to order at Amarillo, Tex., May 9, with a summary of crop conditions by Vice Pres. E. W. Harrison of Hereford, who stated that crop reports at present were greatly varied. Indications were that a large portion of the abandoned winter wheat acreage had been replanted with spring wheat. The total prospect of the south plains is 30 per cent, and of the north plains 50 per cent; of oats, barley and the sorghums 150 per cent.

J. B. Ross and J. B. Wallace, grain inspectors, urged more careful testing when buying at country elevators as partial remedy for the unsatisfactory federal grain inspection.

A. S. Stinnett of Amarillo warned the dealers that a request for a reduction in the freight rate on sorghums to Kansas City, Mo., might result in an advance of all intrastate rates. It was voted to send a representative to the rate hearing at Kansas City, May 29.

To aid the work of improving the winter wheat crop it was voted to contribute \$200 to the newly organized Southwestern Wheat Improvement Ass'n.

Resolutions were adopted requesting that settlement for wheat shipped to Galveston and other ports of export be made on the basis of initial inspection regardless of the grading when unloaded.

That Texas roads equalize the export rate to New Orleans, compared with Galveston.

That a committee of three meet with the Texas Grain Dealers Ass'n to revise the discounts on lower grades of wheat to correspond with present conditions and values.

That a committee prepare and present a bill to the Texas State Legislature for a law compelling prompt settlement of railroad claims.

That a committee work with the Texas Grain Dealers Ass'n to clarify trade rules regarding flat billing.

A resolution was adopted expressing sympathy for the family of W. A. Porter, of Tulsa, Tex., whose death is deeply regretted.

Wm. H. Fuqua spoke on the financial outlook and pointed out its optimistic aspects. He said the world was working more and talking less. He advocated an extension of the War Finance Corporation and a reduction of freight rates as an aid to the farmers and the business community.

Officers elected for the ensuing year are: Pres., E. W. Harrison, Hereford; Vice Pres., A. Liske, Canadian; Sec'y, Lester Stone, Amarillo; Directors, T. R. Connally, Clarendon; L. C. McMurtry, Pampa; J. W. Elliott, Press, and Allan Early, Amarillo.

The banquet tendered the visiting dealers was enjoyed by all; and the theater party voted the show an excellent one.

Asked— Answered

[Readers who fall to find information desired on any subject of interest to grain dealers should send us their query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

How to Nail Metal Siding?

Grain Dealers Journal: We are experiencing considerable trouble with our iron siding coming loose at the lap, due to the continuous contraction and expansion of the metal which works the nails out and allows water to run on the inside. Where we have cupolas the water falls inside the bins. How can the difficulty be overcome?

Our sheets are 5 ft. x 4½ ft. galvanized iron stone imitation siding and when they get loose the water runs behind the sheet at the edge. We have had the siding renailed but the constant contraction and expansion will work the nails loose, allowing the sheets to separate.—Pierce Elevator Co., Union City, Ind.

Grain Dealers Journal: We note the letter from the Pierce Elevator Co. on how to nail metal siding; and would say we also have had a great deal of trouble in keeping the metal siding from coming loose. Our building is studded and has never settled any. Two years ago I had it all renailed and it is working loose again.

I have given it much thought and have come to the conclusion that it is caused by the slight vibration of the building when in use, as the nails work loose and eventually drop out. The remedy given may apply to a cribbed building, but I am sure our building has never settled.—W. B. Wallace, mgr. Windsor Grain Co., Windsor, Ill.

Ans.: It is quite probable that most of the trouble is due to settling of the building under conditions of uneven loading and that contraction and expansion of the metal is only a contributing factor. The only remedy would be to remove the siding and to replace it by nailing it so as to permit one sheet to move over another instead of buckling and tearing when the building settles.

Flat siding sheets should be nailed on the walls in the following manner:

Starting at the top, the first sheet should be nailed along its top edge; and a row of nails should be driven into the sheet about 4 inches from the bottom edge. The succeeding lower sheet should be pushed under the edge of the sheet above to the distance required for the proper lap, say about 2 inches. This sheet should then be nailed about 4 inches from its bottom edge, and other sheets should be similarly placed to cover the building.

When siding is so placed, each sheet is held near its bottom edge by a row of nails, while its top is held by the sheet above. There is very little opportunity for wind to work sheets loose, and water is effectually excluded. At the same time, sufficient allowance is made for expansion and contraction of the metal and for the settling of the building.

Ans.: Where this trouble has existed, it has been the practice to fasten sheets to wood by means of nails. If so, it is inevitable that they would have this experience, and so far as we know the only means of overcoming this objection is to fasten sheets by a different method. The use of steel strap possibly from ¾" to 1" wide and about No. 18 Ga. riveted to the sheets is very common, or else the use of purlin nails.—Joseph T. Ryerson & Son.

Ans.: We make elevator siding in short lengths for a double purpose—one is to prevent buckling of the sheets, should the building settle—and the other is to prevent great expansion and contraction, which of course will not take place on short lengths of sheet metal.

Possibly the contractors on these elevators who complain used a plain wire nail. A nail with a burred head or a cement coated nail would in our opinion be most favorable.—Milwaukee Corrugating Co.

Ans.: On all this work we use galvanized barbed nails and we have not had any trouble with the iron coming loose. We put these nails in every other corrugation and if the sheet is 4 ft. long or less than 8 ft. we put one row at the top and one at the bottom and if the sheet

is 10 ft. long we put three rows of nails on every other corrugation. This should answer the purpose of any studded house and the iron should not have to be renailed.—Kaucher, Hodges & Co.

Ans.: The best way to apply iron siding to an elevator is to use long sheets and run the corrugations horizontal instead of short stuff vertical. The corrugations will take up the settling of the crib and it can be nailed so it won't blow off. Caution must be used in applying the siding so the corrugations will match on the corners the same as lap siding. Corner irons can be made by bending short sheets with a crude clamp.—L. D. Wait.

Ans.: It is not best to use siding over 32" in length on crib houses and 40" in length on studded houses. The second place, the 2 plies should not be nailed thru laps.

I have always made a practice to lap the siding at ends 2" each way with nailing the top within about 2" of the top edge and then lap the next layer 2" over the bottom and nail thru the bottom end of the second layer at least 3" from the bottom end. I also let the side edges lap 2 corrugations, but I do not put any nails in side laps. This I have found to be the most successful way of applying iron siding.—H. M. Motley, prop. Corn Belt Construction Co.

Ans.: We presume that the Pierce Elevator Co. refers to corrugated iron or steel siding. If, however, they mean flat sheets applied without corrugating, we wish to say that it is difficult to apply this material satisfactorily.

In reference to applying corrugated sheets a certain rule has to be followed, which none but a practical elevator man, or those having experience in applying corrugated sheets to elevator siding, know.

To apply sheets to studded cribs, we mean by this cribs built up of 2x6's laid on top of each other, the following rule should be followed:

Sheets should not exceed 22" in length; they should be so laid that the overlapping sheet laps about 1½ to 2", and the nails driven thru the overlapping sheets about 4" from the lower edge. This allows for settling of the crib when it is loaded with grain. The side laps should be fastened by driving nails into the second corrugation so that the under-lapping sheet is free to move up and down. This, however, is not so necessary as nailing the sheets 4" from the bottom edge. If this is not done, the settling of the crib or the expansion and contraction through dampness or drying out of the wood will have a tendency to pull the nails.

We have erected an enormous amount of this material and have never had a single complaint. If the Pierce Elevator Company will employ sheet metal workers fully conversant with applying of corrugated sheets on grain elevators, they will not have any trouble.—The Sykes Co.

Ans.: Many times the metal siding is purchased in long sheets, to make a saving of about ten cents per hundred square feet, probably done through lack of knowledge. We generally buy our corrugated sheet metal in sheets approximately 26" wide and 32" long, in that it is much more easily handled and put in place.

Another and probably the worse fault lies in the nailing. We as a rule nail our metal siding with galvanized barbed nails, one to about every second groove on the two and one-half inch corrugated siding, at a point about two inches from the bottom of the sheet, and do not nail the upper part; but slide it up and under the sheet above it, about an inch.

To do a first-class job of nailing, on corrugated siding, you should measure and hold the sheet in exact position and the best manner in which it can be done is with the chalk line, and by men understanding this class of work.

Before nailing the bottom of the upper sheet, the lower sheet should have a chalk line with a few nails tacked in where the chalk line is. This will hold up the bottom sheet until the nails can be driven in the bottom of the upper sheet. This will hold the bottom sheet and the two nails in the bottom of the upper sheet can be removed, and then be chalked and lowered again and the bottom sheet moved up one inch and nailed above; this applies to buildings of cribbed nature.

The reasons for metal siding coming loose on studded buildings, and especially on studded elevators, which as a rule do not stand rigid and weave from uneven loading and unloading of same, and the habit in general is and has been to use the long corrugated sheets, thus making them weave and then eventually pulling the nails; and the wind whipping the sheets loose from the building.

The above can be largely overcome by using the shorter sheets.

Furthermore, it is difficult to nail the corrugated siding to the sheathing and make a good job with the long sheets, on account of the thickness of the sheathing being so slight that the nails do not have a secure hold.

We advise the same method of nailing and the use of the short sheets on a studded building, as well as on a cribbed building, as being the most secure and lasting manner in which corrugated metal siding may be applied on a building.—Newell Construction & Machinery Co.

Ans.: We believe that the trouble they experience could be obviated by the use of cleats instead of nails, this regardless of the fact that they apply the material to a wooden surface. As we understand it, the elevator is studded and therefore the cleats could be fastened to the stud.—United Alloy Steel Corporation.

Side Track Contract Unreasonable.

Grain Dealers Journal: I am sending copy of a contract sent me by the New York, New Haven & Hartford Railroad Company. This sidetrack in question is a public switch. I have done business for 20 years on this side track at the place marked and designated on the blue print as yellow.

CONTRACT.

CONTRACT made this sixth day of April, 1922, between THE NEW YORK, NEW HAVEN & HARTFORD RAILROAD COMPANY (hereinafter called the Railroad Co.) and I. W. BEERS of Mount Carmel, Connecticut (hereinafter called the Contractor).

1. The Railroad Company agrees to continue to treat as a sidetrack a certain section 40 feet in length of the present easternmost track of the New Haven Division of the Railroad Company, beginning at a point in said present track, 15 feet, more or less, northerly of the center of the freight house at Mount Carmel, Conn., and extending thence northerly a distance of 40 feet, entirely on land of the Railroad Company.

Substantially as shown in yellow on print hereto attached, made a part hereof and entitled: "N. Y. N. H. & H. R. R. New Haven Division Tracks and Buildings at Mount Carmel, Conn. Scale 1"=100' May, 1918, April 22, 1921"; (said track shown in yellow herein-after called said sidetrack).

2. And the Railroad Company agrees to switch to and from said sidetrack carload freight consigned to and from the contractor over the railroad of the Railroad Company, at such times as shall be convenient to the Railroad Company, subject to reasonable charges from time to time made by the Railroad Company, the placing upon said sidetrack of any car containing freight consigned to the contractor to be deemed a full delivery of such freight to the Contractor.

3. In consideration whereof the Contractor agrees to pay on presentation all bills for freight and car service charges.

4. And the Contractor agrees to return to the Railroad Company all cars placed on said sidetrack for the Contractor in as good condition as when received, ordinary wear and tear excepted, and except as is otherwise provided in section 5, or to pay the Railroad Company the cost of replacing such cars or putting them in such condition.

5 (a) It is understood that the movement of railroad locomotives involves some risk of fire, and the Contractor assumes all responsibility for and agrees to indemnify the Railroad Company against loss or damage to property of the Contractor or to property upon the Contractor's premises, regardless of the Railroad Company's negligence, arising from fire caused by locomotives operated by the Railroad Company on said sidetrack, or in its vicinity for the purpose of serving the Contractor, except to the premises of the Railroad Company and to rolling stock belonging to the Railroad Company or to others, and to shipments in the course of transportation.

(b) The Contractor also agrees to indemnify and hold harmless the Railroad Company for loss, damage or injury from any act or omission of the Contractor, or the Contractor's employees, or agents, to the person or property of the parties hereto and their employees, and to the person or property of any other person or corporation, while on or about said sidetrack; and if any claim or liability other than from fire shall arise from the joint or concurring negligence of both parties hereto it shall be borne by them equally.

6. The Contractor agrees to provide sufficient clearance, from structures or objects erected over or along said sidetrack, for the safe operation of locomotives and cars on said sidetrack, and to secure the approval of the Railroad Company in advance of the erection of permanent structures or objects which may affect the safe operation of said sidetrack.

8. The Railroad Company assumes no obligation to render the service herein provided for if the operating conditions shall become so changed by reason of electrification, or change of grade of tracks or highway, or otherwise, as to make further rendering of the service impracticable, nor shall the Railroad Company be required to be at any expense in connection with adapting said sidetrack for use under such conditions.

9. No provision of this contract may be waived or altered, nor shall the Contractor assign or lease or otherwise convey, any rights in or to the use of said sidetracks, or any rights under this contract, unless the written consent of the Railroad Company shall first be obtained.

10. This contract shall be terminable upon

one (1) month's written notice from either party to the other.

THE NEW YORK, NEW HAVEN & HARTFORD RAILROAD COMPANY.

By

General Manager.

The railroad company now say I have got to sign this contract to get service of having the cars switched and placed for unloading at my warehouse. The refusal to sign will be at the penalty of discontinuing to place further cars at my warehouse. Cars then placed will be done at nominal switching charges.

In order to get service and have cars placed can they compel me to sign such a contract?

Are they obliged to place cars at one's warehouse for unloading?

Can they charge a switching charge for placing such cars?

I strongly object to signing this contract in question.

Kindly give me any information regarding my legal rights, and the proper stand to take to protect these rights, through the Journal, and greatly oblige, I. W. Beers, Hamden, Conn.

Ans.: The carrier performing the transportation service usually makes no charge for its own switching service from or to sidings located on its track within the switching limits of a station.

A carrier may not perform a switching service for one plant and decline to perform it at a competing plant in the same general territory on the ground that it is more convenient to perform the service at one plant than at the other, or because it has been customary to do it at one and not at another.—*Alan Wood, Iron & Steel Co. v. P. R. R. Co., 22 I. C. C. 540, 545.*

The granting of free transfer service to the private sidings of some consignees and refusing such service to complainant is held to be unjust discrimination. *Pierce Co. v. N. Y. C. & H. R. E. Co., 19 I. C. C. 579, 581.*

The carrier having the line haul should deliver traffic so handled without additional charge to industries located upon its tracks within its switching limits. *Curtis Bros. & Co. v. S. P. Co., 23 I. C. C. 372.*

The foregoing decisions clearly establish the right of the shipper to free switching service. To justify a charge at one station the carrier would have to make the equivalent charge at all other stations; or it would have to rule the shipper in question to be located outside its switching limits and therefore subject to charges, and even so there would have to be no discrimination in the distance hauled from the main line.

The shipper having the right to have empty and loaded cars set on the side track at his warehouse, there is no consideration in the contract offered by the New Haven Railroad Co. for the signing of the contract. This point was covered in the recent case of *Paul Kuhn & Co.*, where the Supreme Court of Illinois held that the demand of the railroad company that Kuhn sign such a contract absolving the railroad company from liability for loss by fire, etc., before it would put in the switch track, was unwarranted, as being without consideration. Kuhn having the right to the switch without any burdensome conditions whatsoever. In other words, the railroad company can not charge for something that the shipper is entitled to free of charge.

Replying to the question "In order to get service and have cars placed can they compel me to sign such a contract?" it can be said that the company could just as properly require the shipper to furnish floral decorations for the railroad manager's office, as the contract has nothing to do with the service.

The owner or tenant of the grain warehouse has a legal right to recover damages from the railroad company for setting fire to the plant by locomotive sparks; and the contract offered is merely a brazen attempt to cheat the shipper occupying the warehouse out of his legal rights by a pretended consideration.

If the shipper signs the contract at all he should first erase the clauses 5 (a) and (b), the other clauses not being particularly objectionable.

Oppose Amendment of Transportation Act.

Grain Dealers Journal: The general freight agent of the railroad company has asked us to oppose the Capper Senate Bill No. 1150 and the Sweet House Bill 6861, the purpose of which is to amend the Interstate Commerce Act.

It has been left to me to get some reliable information for the chamber of commerce, so we can take wise action. The railroads maintain that it would be very unwise to support this bill. We have the interests of the farmers at heart, if the rates could be reduced.—*Stalder*

Mercantile Co., Walter J. Stalder, Grenville, N. M.

Ans.: These bills repeal section 15a of the Act to Regulate Commerce and reserve regulation of the intrastate traffic to the states. Capper's bill was introduced nearly a year ago, before the recent Supreme Court decision giving the Interstate Commerce Commission power over state rates. His bill in section 15 provides that the orders of the Interstate Commerce Commission "shall not be construed to apply to any individual or joint rate, fare, or charge, or rates, fares, or charges, on shipments moving wholly within one state, and that the jurisdiction to regulate all such intrastate rates, fares, and charges is hereby expressly reserved to the several states."

The National Industrial Traffic League has gone on record as opposing the Capper, 1150; the Sweet, 6861; and the Hoke, 8131, Bills.

The Kansas Meeting at Wichita.

The Kansas Grain Dealers Ass'n will celebrate its silver anniversary with biggest meeting of its 25 years at Wichita's new palatial hostelry—the Broadview, which will entertain grain dealers only during the days of the convention, May 16, 17 and 18th.

Every member of the Wichita Board of Trade is devoting his days and nights to planning new and pleasing courtesies for the entertainment of the visitors and Secretary Smiley has prepared a very attractive program which includes the following addresses:

"Grain Exchanges, Their Obligations and Prerogatives"—L. L. Winters, Director, Board of Trade, Chicago.

"Is Future Trading an Essential Function in the Commercial Distribution of Grain"—C. E. Huff, Oronoque, Kans.

"What the Local Elevator Pays for the Slice It Gets Out of the Consumers' Dollar"—R. M. Green, Dept. of Agricultural Economics, Manhattan, Kans.

"Our Government and Business Man's Relation Thereto"—B. E. Clement, President, Grain Dealers National Assn., Waco, Tex.

"Wholesale Life Insurance"—O. T. Cropper, Manager, Kansas Agency, Aetna Life Ins. Co., Topeka, Kans.

"Business Prospects"—C. Q. Chandler, pres. First National Bank, Wichita, Kans.

Government Scale of Discounts—Should They Be Discontinued? Subject opened up for discussion by the Secretary.

"Are the Standards as Applying to Heat-Damaged Kernels of Wheat Too Rigid?"—J. S. Hart, Chief Grain Inspector of Kansas, Kansas City, Mo.

"Radio Equipment and Installation"—R. B. Waltermire, Secretary, Board of Trade, Wichita, Kans.

"Railroad Leases"—George A. Wells, Secretary, Western Grain Dealers Assn., Des Moines, Ia.

The last session will be devoted to a discussion of "Should Weighing and Inspection Fees Be Reduced?", to committee reports and the election of officers.

A SAMPLE of wheat was sent to Kansas City from Red Wing, Kan., recently. It is said to have been quite feeble, and to have shown the effects of attacks by brown worms, each about a half inch long. The man who sent it claimed thousands of acres in the vicinity are affected, and he expressed the belief there is a small chance of producing one-fourth a normal crop.

Coming Conventions.

May 16, 17, 18. Kansas Grain Dealers Ass'n at Wichita.

May 26, 27. Texas Grain Dealers Ass'n at Fort Worth.

May 29, 31. Southern Seedmen's Ass'n at New Orleans, La.

May 31, June 1, 2. Millers National Federation at Kansas City, Mo.

June 19, 20. Wholesale Grass Seed Dealers Ass'n at Chicago.

June 21, 22. Ohio Grain Dealers Ass'n at Cedar Point, O.

June 21, 22, 23. American Seed Trade Ass'n at Chicago.

July 25, 27. National Hay Ass'n at Cedar Point, O.

Oct. 2, 3 and 4. Grain Dealers National Ass'n at New Orleans, La.

Liability of Elevator Owner for Machinery Sold to Contractor.

The Supreme Court of Kansas on March 11, 1922, gave a decision against Fairbanks, Morse & Co. and in favor of defendants, Farmers Union Elevator Co., of Allen, Kan., in a suit brot to recover for a 15-h.p. gasoline engine and other machinery that went into the equipment of the company's new elevator.

The company signed a contract May 28, 1919, with F. W. Lehrack to build and equip the elevator for \$8,234.55.

Lehrack returned to Kansas City and gave plaintiff a written order for the machinery which he signed "Purchaser, Farmers Union Elevator Co., by F. W. Lehrack."

The elevator company kept paying Lehrack up to about 90 per cent of the value of the work as being done, and sent Fairbanks, Morse & Co. finally \$500, leaving \$883 due on the machinery. Refusing to make further payments suit was brot, but the court left it to the jury to find the fact as to whether the elevator company had paid out the full contract price. The jury so found, and then the court held Fairbanks, Morse & Co. had no claim against plaintiff.

The testimony of plaintiff's credit manager is that he relied upon Lehrack's statement as to his authority to charge the goods to the defendant. He testified:

"I asked him [Lehrack] whether he was authorized to sign the name of defendant to these orders, and he said he was. I did not ask him to produce the authority because we had similar or other cases of exactly the same nature. This was not necessary. I took his word for it. I had dealt with Mr. Lehrack possibly two or three times before that. My company had been doing business with him two years to my knowledge. I believed what he said. I did not inquire from him if he had any contract with the defendant, because I was not interested in the contract."

The secretary of the elevator company testified that he sent the \$500 payment to plaintiff at the request of Lehrack's foreman of construction.

The court said:
The testimony of the credit manager of the plaintiff shows that he was not satisfied with the representations made by Lehrack, and attempted by correspondence with the defendant to get the latter to acknowledge in writing the authority of Lehrack to sign the name of the elevator company to the contract, or to obtain an acknowledgment of defendant's liability. Long before any of the goods were shipped, he knew that the elevator company had declined to do this. He had their letter, stating the material parts of the contract between the company and Lehrack. The statement was that—"We are to pay him for building and equipping same with the 15 H. P. Z type engine. * * * We will be ready to take up the bills as they come."

This was notice of the fact that no bills would be paid unless satisfactory to and authorized by Lehrack. The credit manager's subsequent efforts to secure a written acknowledgment of defendant's liability establishes conclusively that the plaintiff did not regard anything said in this statement as sufficient to bind the defendant to pay. The plaintiff knew before any of the goods were shipped that it could not rely upon any agreement by the elevator company to become responsible for the purchase price. With full knowledge of these facts, it could not by the mere shipment of the goods to the elevator company rely upon an implied contract binding the defendant.

There are cases, it is true, which hold that one who ships goods to another may acquire the right to treat him as a buyer because of his failure to notify the sender to the contrary. But this rule is not an arbitrary one, and depends upon the relations between the parties and the circumstances. The circumstances under which the goods were shipped to the defendant in the present case were not sufficient, in our opinion, to require the defendant to refuse to accept the goods when they arrived. It was at the suggestion of the plaintiff that the contract was made with Lehrack to build the elevator. The testimony of the credit manager shows that Lehrack was not asked to produce any authority to purchase in the name of the defendant because of transactions of the same kind they had had with him before. There being no disputed fact to submit to the jury, the court properly directed a verdict against the plaintiff.—295 Pac. Rep. 367.

A DECREE has been announced by the French government restricting exports of all agricultural products, with the exception of wheat and potatoes. The decree is already operative.

Letters

[Here is the grain dealers' forum for the discussion of grain trade problems, practices and needed reforms. When you have anything to say of interest to members of the grain trade, send it to the Journal for publication. It may draw out the views of others.]

Pay \$23 Per Year Rental.

Grain Dealers Journal: The railroad company here charges us \$13 a year for the space taken up by our elevator and coal sheds and \$10 additional for our implement building.—Iliff Farmers Co-operative Elevator Co., Iliff, Colo.

Wants Corn Sheller Without Flat Bearings and Wooden Bridge Trees.

Grain Dealers Journal: Will you please tell me where I can purchase a medium capacity corn sheller having other than the old fashioned flat bearings on wooden bridge trees? Will you also please tell me why all of those standard elevator machinery manufacturers from whom we would like to purchase our equipment make only corn shellers of the wooden bridge tree and flat bearing type? The loss in power and the fire hazard are the two points I have in mind.—W. P. Jones.

Rust Resistant Iron Depends on Alloys.

Grain Dealers Journal: A great many tests have been made and much research work done on the subject of corrosion resistance of iron, and the conclusion is that purity and homogeneity alone do not produce the greatest rust resistance. But these plus the addition of copper give the best results.

For years the electrolytic theory of corrosion was used to prove that alloys added to iron was harmful, but the recent accomplishment by metallurgists of that long sought for result, namely, an absolutely stainless and rustless iron, has modified this theory.

European and American metallurgists have proven conclusively that the degree of rust resistance depends essentially on the amounts of different alloys used.—R. M. Nicholson, Canton, O.

False Promises Not Helping Cause of Bulk Handling.

Grain Dealers Journal: I was interested in reading a letter from Mr. A. E. Lindstrom, President of the California Farm Bureau Elevator Corporation, Berkeley, Calif., in your April 25th issue, relative to the use of bags in California for the handling of grain.

While there is some agitation here on the part of elevator promoters, and associations who are anxious to handle the farmers' grain, promising better service and bigger returns, the majority of the grain growers are still in favor of handling their grain thru regular and legitimate channels as of old.

For the past year I have noted in your Journal and other trade papers mention of the failure of the many associations and elevator companies in the middle West, who tried to handle grain for the grower on a co-operative basis. It seems now as tho the promoters had invaded California, and were bound "willy nilly" to help the poor farmer run his business in a new and up-to-date manner, forgetting that for the past forty years the grain grower of this state has marketed his grain thru the regular dealer at a satisfactory profit.

To handle grain in bulk would mean changing the entire car equipment of the railroads and further the building of elevators at differ-

ent points throughout the state at an enormous cost to care for the grain as it comes from the fields. At present the farmer sells his warehouse receipt for cash and his troubles are over.—Very truly, W. R. Chesley, Colusa, Calif.

Fees Designed Only to Cover Expense of Inspection.

Grain Dealers Journal: Fees charged for grain inspection in Illinois are designed only to cover the expense of the service rendered and do not yield a profit to the Department having supervision of this work.

As a matter of course, under this system the fees received for grain inspected should be some in excess of the amount paid for the work, to guard against incurring a deficit and thus becoming a liability upon the State.—George A. Barr, Director, Dept. of Trade and Commerce, Springfield, Ill.

Used Belts for Conveying Grain in 1879.

Grain Dealers Journal: My first experience with belt conveyors started in New York City in 1879. At that date there were two belts in operation, one on the Pennsylvania Railway Elevator Shipping Gallery and one on the Erie Elevator. I designed and installed the equipment on Dows Stores in Brooklyn. Previous to this, one of the elevators at Buffalo used a conveying trough conveyor. That consisted of two narrow belts spaced parallel, with iron bars and a trough-like filling of duck used between them.

I am not in possession of the exact date, of the first installation of belt conveyors in this country, but the date above referred to is probably the germinating period.—Macdonald Engineering Co., Per J. A. Macdonald, San Francisco, Calif.

Finds Favorable Advantages to All in Underwriters' Grain Ass'n.

Grain Dealers Journal: In our opinion the method of the insurance companies for providing fire insurance on terminal elevators, has been more satisfactory, since the organization of the Underwriters Grain Ass'n than before that Association was formed.

The cooperation on inspection work has made the work much more thoro, and has established a feeling that the constant and uniform supervision of the risk covered, has insured a better physical condition and consequently, an elimination of hazards that would not have been brought about by the insurance companies acting independently.

This work tends to reduce the loss ratio and a low loss ratio on the class means lower rates to the owners, when the record is once established. Further, the plan brings the elevator owners in direct touch with the insurance companies, which is very desirable when forms of coverage and rates of premium are to be considered and discussed.

We understand that insurance rates are based on the average experience of the class of risk covered, and as the plan gives the insurance companies a wider distribution of values and consequently a better average, the present method is attractive to them. We find that we are relieved of the work and annoyance of companies asking for cancellations and changes in policies, pertaining under the old plan, and we are now assured of sufficient coverage at all times.

We also believe the present arrangement very valuable in the matter of prompt and satisfactory adjustment of fire losses. As to the protest on the part of local insurance agencies against the continuation of the Underwriters Grain Ass'n, this undoubtedly is due to the fact that their commissions have been reduced to some extent. We, however, feel that they should look at the matter in a broad-minded way in respect to the value that ac-

crues to their clients, and not look at it solely from the point of shrinkage in their commissions.—Very truly, The Van Dusen Harrington Co., By Fred C. Van Dusen, Vice President, Minneapolis, Minn.

Fire Hazards of D. C. Motors.

Grain Dealers Journal: The choice between direct and alternating current motors usually depends upon the current which is available for power. Alternating current is, of course, more largely used and its use is being extended more rapidly than is direct current, altho there are some cases where direct current only is available. Except with the use of apparatus for its conversion into alternating current, which apparatus involves a considerable expense, direct current only is therefore available.

With the modern direct current motors which are chiefly of the commutating pole type, the danger from sparking is practically limited and while we believe the underwriters consider them somewhat greater hazard than alternating current motors, yet with proper methods of installation and protection any fire hazard can be practically eliminated.—Allis-Chalmers Manufacturing Co., By A. K. Birch.

Uniform (?) Grading of Wheat.

Grain Dealers Journal: We were in hopes that the meeting held here March 1st between representatives of the Dept. of Agri. and the grain trade for the discussion of the wide variation in the grading of grain would result in improvement, but complaints from country shippers do not justify the claim that grading is any nearer uniform than before.

Recently a car of wheat originating in Western Oklahoma moved through Enid where it was stopped for inspection and officially graded No. 2 by a licensed inspector. From Enid the car of wheat moved direct to Sherman, Texas, where it was again inspected by a licensed inspector and graded No. 5. Appeal from this latter inspection was taken and the grade of No. 5 sustained, therefore, as a last resort the car was forwarded to Galveston where it was inspected and unloaded as No. 3 wheat.

This good old Government of ours has the reputation of functioning "One Hundred Percent" yet it goes without saying that there is at least one branch of it that is falling short and needs bolstering up.—Yours truly, C. F. Prouty, Sec'y, Oklahoma City, Okla.

YOUR ELEVATOR LEGS

Are they in line?
Belts running true?
Any loose buckets?
Head pulley rubbing?
Then the Fire Fiend'll get you

If
You
Don't
Watch
Out.—Our Paper.

Leaking in Transit

Grain dealers can help brother sufferers in the collection of claims for loss by reporting to Grain Dealers Journal, for free publication, car initials, number, place, date and condition of car seen leaking grain in transit.

Recently we have received reports of the following leaking or bad order cars:

M. P. 34937 passed thru Taylorville, Ill., on the Wabash Feb. 25 with south door open. Car was loaded with corn.—L. T. Jones & Co., by L. T. Jones.

U. P. 124793 passed thru Brighton, Colo., Mar. 1, southbound, leaking corn thru a hole in the side of the car. Hole had been patched with a piece of tin. Train did not stop so could not fix or examine carefully.—The Brighton Farmers Co-op. Elvtr. Co.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

ARKANSAS.

Pine Bluff, Ark., May 5.—Crops very backward. No planting so far as to amount to anything—too much water. Look for a very short cotton crop. Possibly a good crop of late corn will be planted.—Westbrook Grain & Mfg. Co.

CALIFORNIA.

Bakersfield, Cal., Apr. 28.—The grain crop is needing rain; we had plenty of rain during the winter but unless we have a good spring rain it will greatly lessen the crop.—E. R. Long.

COLORADO.

Otis, Colo., May 5.—Wheat looks fine; rained 3 ins. last week.—Otis Grain Co.

Deertail, Colo., May 3.—We are having the best prospects for grass and wheat in many years.—Deertail Farmers Union Elvtr. Co., Fred I. Nicholl, mgr.

ILLINOIS

New Milford, Ill., May 6.—Crops growing fine. Farmers ready to plant corn.—A. Ross, agt. Armour Grain Co.

Adeline, Ill., May 4.—Oat seeding all finished; coming up nicely, stands good. Farmers are starting planting corn; ground in fine working condition.—Armour Grain Co.

Ridge Farm, Ill., May 1.—The oats will all be put in this week if it does not rain too much; the acreage will be cut down some. Wheat looks fine except where too much water, none will be plowed up. About a normal corn crop will be planted.—Frank Jones Grain Co.

INDIANA.

Denver, Ind., May 8.—The growing wheat is looking fine in this territory.—Meyer Grain Co., E. S. Kline, mgr.

Hortonville, Ind., May 8.—Weather nice; wheat looks fine; oats late on account of wet weather; early farm work progressing nicely now.—Farmers Co-op. Co., F. T. Hinshaw.

Mooreland, Ind., April 25.—Wheat in this territory is looking good but only a small acreage sown. Only a small percent of the oats sown.—Mooreland Co-op. Co., L. H. Hoover, mgr.

Moran, Ind., May 3.—Wheat in this section is looking fine outside of a little wet weather damage. Farmers are very late with corn and oats but are working all the force now and with nice weather will get their crops out in good time yet.—Otto Lefforge.

Bloomfield, Ind., May 3.—We do not think the wheat in this locality is in very good condition, account too much rain. Seems to be growing too fast and not stooling properly. All wheat and alfalfa and red clover in river bottom killed by high water which means quite a loss to this county (Greene).—Bloomfield Mill & Elvtr. Co.

Evansville, Ind., May 4.—Hessian fly has appeared in many of the wheat fields in the northern part of Wabash county, according to reports received by grain men here. A number of farmers report that their wheat is filled with the larvae. Thus far the damage has not been serious. Few reports of Hessian fly in the wheat in southern and central Indiana have been received.—C.

Bicknell, Ind., May 4.—White River has killed all the wheat in the low lands here. More wheat killed here than any time since 1913. The spring has been very wet and the farmers did not get over 20% of an oat crop out and the old crop of oats are all gone; looks as tho we would have a very small supply for next year. These past years corn was very inferior and a great amount of oats are being fed. Corn will be very late.—O. L. Barr Grain Co.

Evansville, Ind., May 4.—Corn planting in Clark county and other counties in Southern Indiana has been delayed two or three weeks because of the excessive rains and floods. In some of the bottom lands farmers have not yet been able to break their ground because of the hard rains. Many of the farmers say they will plant their normal crop in the event that they are willing to plow their ground in time to

plant. Clover fields are looking unusually good for this time of year.—C.

Evansville, Ind., May 4.—Owing to excessive rains in southern Indiana, southern Illinois and western and northern Kentucky, many of the wheat fields have been damaged. In many of the fields in the low lands many yellow spots have appeared. The grain on the hilly ground has not been damaged to the extent of the grain in the low lands. It is estimated that 25% of the growing wheat along the lower Ohio, Wabash, White and Patoka rivers that have been covered during the past several weeks by water from the floods, will be damaged. Owing to the bad condition of the roads in the tri-state section caused by the heavy rains and floods, many of the farmers have been unable to haul their old wheat to the elevators and millers.—C.

IOWA.

Webster City, Ia., May 4.—Increase in oats acreage looks mighty good. Farmers busy planting corn; condition of ground good. Expect movement of corn and oats after corn is all planted.—Webster City Elvtr. Co.

KANSAS.

Nashville, Kan., Apr. 26.—Wheat is looking fine.—Larabee Flour Mills Corp., J. B. McDonald, agt.

Hazleton, Kan.—Growing wheat good; plenty moisture.—W. S. Ballard, agt. Bowersock Mills & Power Co.

Sedgwick, Kan., Apr. 26.—Business has been very heavy this spring in field seeds.—Sedgwick Alfalfa Mills.

Hope, Kan., Apr. 26.—Wheat looks fine in this vicinity.—W. R. Waring, pres. Farmers Co-op. Elvtr. & Supply Co.

Rolla, Kan., Apr. 26.—We will have about 60% of a wheat crop in this locality. Wheat is doing fine.—A. L. McClure.

Atwood, Kan., May 5.—Crop here looks fine. Plenty of moisture and sunshine.—Atwood Equity Exchange, J. A. Bowles, mgr.

Lebanon, Kan., May 6.—Growing wheat looking fine but only about 50% left standing.—Lebanon Mill & Elvtr. Co., C. M. Isom, sec'y-treas.

Morganville, Kan.—Crop conditions are very favorable here and we are getting our share of moisture.—O. Ivar Norden, mgr. Farmers Union.

Hazleton, Kan., May 1.—We never had better prospects for wheat than we have at the present time.—W. R. Williams, mgr. Vance Grain Co.

Oxford, Kan., Apr. 28.—We are having plenty of rain; wheat looking fine, oats a fair stand, but small. Some corn planted.—M. G. Hershberger, agt. Hunter Mfg. Co., Wellington, Kan.

Trousdale, Kan., Apr. 30.—We are having plenty of rain here and from present prospects will have an average wheat and oat crop. No old wheat to speak of in the farmers' hands.—E. B. Schmidt.

Holton, Kan., Apr. 22.—Wheat looks fair but there are lots of chinch bugs. Almost all of the wheat is gone from the farms. Lots of corn back in farmers' hands, but 30% of farmers are buying corn.—W. E. Beightel, agt.

McPherson, Kan., Apr. 26.—Wheat here in fine condition but we are having too much rain; however, weather is cool and cloudy, which is ideal for wheat, but has been too wet to plant corn. Acreage of oats small.—Miller Grain Co., Lee Miller.

Barnard, Kan., May 6.—About 30% abandonment wheat acreage. Condition 60% to 70% on balance; very little left in farmers' hands. Old wheat, oats and barley looking good. Ground thoroughly soaked and in good shape for corn planting, which has been greatly delayed account of wet weather.—Jackman Roller Mill, H. M. Jones, mgr.

Schulte, Kan., May 3.—About 12% of wheat in farmers' hands of the old crop. Growing wheat looking fine; would say about 95% crop in this locality. Very little corn planted on account of so much rain; oats and barley growing slowly. The largest share of the ground is in wheat here.—Farmers Elvtr. Co., John Mount, mgr.

KENTUCKY.

Bardwell, Ky., May 5.—Wheat prospects good.—Harlan-Lowe Mfg. Co.

MARYLAND.

Hagerstown, Md., May 3.—Grain business has been good the past season. Not much wheat in

farmers' hands but still a few holding for higher prices.—C. M. Horst.

MICHIGAN.

St. Charles, Mich., May 4.—Wheat is looking only fair at this time; weather condition very backward. Oats just being sown.—W. S. Coy.

Gustin, Mich., May 4.—Condition of winter wheat in this locality is not very promising, a little rain would help wonderfully. Rye will average better than in 1921.—X.

Rudyard, Mich., May 4.—Farmers are very busy seeding. Seed going in in fine condition; more seeding being done this year than ever as there was a large amount of new land cleared off last summer.—R. J. Forgrave.

MINNESOTA.

Barrett, Minn., May 4.—About 25% of old crop back in the country.—Barrett Grain Co., E. N. Ellingson.

Beardsley, Minn., May 5.—Seeding is about finished and the first seeding is up and looking fine.—Dittes Bros.

Little Falls, Minn., May 1.—Wheat seeding has been nearly completed the past week and

Government Crop Report.

Washington, D. C., May 9.—The Crop Reporting Board of the U. S. Dept. of Agriculture makes the following estimates from reports of its correspondents and agents:

On May 1 the area of winter wheat to be harvested was about 38,131,000 acres, or 6,446,000 acres (14.5%) less than the acreage planted last autumn and 4,574,000 acres (10.7%) less than the acreage harvested last year, viz. 42,702,000 acres. The average of the past ten years was 36,789,000 acres. The ten-year average per cent of abandonment of planted acreage is 10.4.

The average condition of winter wheat on May 1 was 83.5, compared with 78.4 on April 1, 88.8 on May 1, 1921, and 87.1, the average for the past ten years on May 1. A condition of 83.5 on May 1 is indicative of a yield per acre of approximately 15.3 bus., assuming average variations to prevail thereafter. On the estimated area to be harvested, 15.3 bus. per acre would produce 584,793,000 bus., or 0.4% less than in 1921, 4.2% less than in 1920, 23.1% less than in 1919, and 9.0% more than the average of the past ten years.

The average condition of rye on May 1 was 91.7 compared with 89.0 on April 1, 92.5 on May 1, 1921, and 90.2 the average for the past ten years on May 1. The condition on May 1 forecasts a production of about 79,152,000 bus., compared with 57,918,000, last year's final estimate; 60,490,000, the 1920 final estimate, and 57,060,000, the average of the past ten years.

Of spring plowing 63.5% was completed up to May 1, compared with 77.8% on May 1, 1921, and a ten-year average on May 1 of 70.0.

Of spring planting 53.6% was completed up to May 1, compared with 63.5% on May 1, 1921, and a ten-year average on May 1 of 57.8.

Details of winter wheat states follow:

State—	Pct. abandoned.	Acres remaining to be harvested	Forecast 1922 from Final May 1 estimate 1921.			
			Condition May 1, 1922.	Pct.	†Bus.	†Bus.
N. Y....	2.5	428,000	86	94	8,950	8,385
N. J....	4.0	78,000	91	96	1,491	1,539
Penn....	2.0	1,377,000	93	95	25,612	23,625
Del....	2.0	117,000	88	92	1,802	1,300
Md....	2.0	580,000	88	90	9,442	7,952
Va....	1.5	836,000	91	86	10,499	8,301
W. Va....	1.5	247,000	90	92	3,357	3,125
N. C....	1.0	612,000	92	85	6,475	4,500
S. C....	10.0	141,000	66	84	1,210	1,298
Ga....	9.0	166,000	75	85	1,519	1,449
Ohio....	2.5	2,326,000	89	91	41,403	28,272
Ind....	5.0	1,950,000	89	90	32,974	24,144
Ill....	5.0	2,636,000	89	94	48,094	42,638
Mich....	2.0	905,000	84	92	15,204	13,712
Wis....	16.0	87,000	84	86	1,725	1,424
Minn....	12.0	89,000	82	90	1,496	1,288
Iowa....	2.0	576,000	95	95	12,859	8,928
Mo....	3.7	2,945,000	87	91	43,044	34,390
S. D....	6.0	96,000	93	87	1,607	1,050
Neb....	12.0	3,480,000	82	92	54,218	57,559
Kan....	27.0	8,445,000	74	84	106,238	128,564
Ky....	3.0	650,000	95	93	8,336	6,340
Tenn....	2.0	495,000	93	91	5,616	4,500
Ala....	6.0	20,000	85	87	212	210
Miss....	5.0	6,000	87	88	91	84
Tex....	41.0	1,023,000	71	72	12,275	20,810
Okla....	24.0	2,833,000	75	84	32,084	47,325
Ark....	3.5	74,000	88	86	814	958
Mont....	9.0	300,000	85	83	4,590	4,228
Wyo....	11.0	36,000	90	92	713	738
Colo....	20.0	1,173,000	80	90	17,830	16,152
N. M....	60.0	45,000	50	87	405	2,142
Ariz....	1.0	49,000	92	80	1,330	840
Utah....	2.0	145,000	93	98	2,630	2,985
Nev....	1.0	2,000	90	92	46	61
Ida....	6.0	410,000	88	97	9,020	10,279
Wash....	7.0	1,202,000	35	99	28,404	37,457
Ore....	4.0	858,000	91	99	18,505	20,125
Cal....	8.7	693,000	90	80	12,973	8,355

*Eight-year average. †Three 000 omitted.

with continued good weather this week will see it all done. Rye planted last fall is coming up very nicely and expect a large crop; acreage larger than for many years. Farmers optimistic on crop outlook.—Northwestern Milling Co., O. J. Romfo, mgr.

Akely, Minn., May 6.—Crop outlook the very best. Farmers feeling better as values and conditions improve.—H. C. Ervin Co., John Bouck, agt.

MISSOURI.

Archie, Mo., May 3.—Been very wet and cold so far. No corn planted yet.—A. A. Marshall & Son.

Benfon City, Mo., May 5.—Spring very late; only one-half crop oats sown and latest ever seeded. Wheat condition about 80%; no corn planted to speak of.—Johnson & Romans.

Clinton, Mo., May 2.—Very few oats sown around here and preparation of corn ground is quite late, but we consider this a blessing in disguise to most of our farmers as they usually stick corn in too early. If it stops raining right away, this territory should have a large acreage of corn. Wheat, generally speaking, is in good shape; some low lands have been drowned out and other wet lands show the wheat rather yellow, but we predict a good wheat crop.—Mann Grain Co., F. L. Cook, sec'y-treas.

NEBRASKA.

Albion, Neb., May 4.—Crops are looking favorable.—Albion Elvtr. Co., Herman Hanneman, mgr.

Abbott, Neb., May 4.—Wheat is coming out nicely, but some fields will be poor stands.—Farmers Union Co-op. Exchange.

Beaver City, Neb., May 5.—Wheat is in fine condition; about 65% came thru winter. Old wheat about all gone.—C. E. Coffey.

Powell, Neb., Apr. 26.—Wheat in best of condition. Farmers very optimistic as to crops for this year.—Powell Co-op. Co., C. W. Samms, sec'y.

Arlington, Neb., May 6.—Winter wheat is looking good; corn planting is in full swing, prospects good at this time.—Nye-Schneider-Jenks Co., H. L. McKibbers, agt.

Abie, Neb., May 4.—Wheat crop about 65%. Farmers holding corn for 50c a bu. Oats look very poor; ground too hard on top for oats; need moisture.—Abie Farmers Grain & Elvtr., L. Neidl, mgr.

North Platte, Neb., May 3.—The winter wheat has been quite badly hurt by the recent drought in this part of the state. I believe that fully 50% of the wheat sown last fall will be abandoned and sown to other grain or planted to corn.—Nebraska Mill & Elvtr. Co., L. P. Jepson, pres.

Gresham, Neb., Apr. 22.—Wheat in our vicinity looks good. Last year's crop about all moved. Spring seeding of oats will be below normal on account of very wet spring. Some fields of early sown wheat look bad, but will not be 1% of wheat acreage.—Gresham Grain Co., John Bickley, mgr.

Lodge Pole, Neb., May 5.—Had some two inches of rain during the last week, but winter wheat does not show any improvement. Under the most favorable weather conditions Cheyenne County will not produce over a third of a crop of winter wheat. Some spring wheat being planted.—Farmers Union Co-op. & Stock Ass'n, A. R. James, Jr., Mgr.

NEW MEXICO.

Clovis, N. M., Apr. 28.—We have had general rains over this territory the past few days and tho it came too late to make much wheat, the

prospects are good for milo, kafir and corn crops. We believe not over 5% of last year's crops of wheat, corn, kafir and milo remain on the farms.—Robert Stone Grain Co., successor to Lester Stone & Co.

NORTH DAKOTA.

Newville, N. D., May 8.—Wheat about all sown. Plenty moisture to germinate.—Newville Elvtr. Co.

OHIO.

Rudolph, O., May 1.—The farmers of this section are busy sowing oats. If the weather permits, there will be a large acreage of grain this year as there will be no sugar beets grown here.—Liberty Grain Co.

Thackery, O., May 2.—Condition of growing wheat good. Oats seeding done a little late, however. Corn, like oats, will be late account of rains. No corn planted to date. Prospects good for all grass crops.—Niswonger & Billhimer.

OKLAHOMA.

Byron, Okla., May 7.—Wheat in this section of the state is in the best of condition.—Byron Grain Co.

Avard, Okla., May 6.—Crop is very poor around here. Only about one-third old wheat, practically all in.—G. W. Morris.

Lawton, Okla., Apr. 22.—There will not be a great deal of wheat in this locality as the dry weather took it early. Will be a good acreage of spring crops.—Western Grain Co.

Bromide, Okla., May 5.—Oats a poor stand, but looking good. Wheat acreage small, but condition fair. Corn good stand, but weedy. An excessive amount of rain this spring and farm work delayed.—Fred Barret.

Elk City, Okla., May 3.—Our wheat looks very promising and looks like we are going to have a 75% crop as compared with 50% outlook two months ago. We have had a lot of rain—need some sunshine.—American Mlg. Co.

Frederick, Okla., Apr. 26.—Our wheat prospect has been pretty poor for lack of rain the last six months. However we have been having plenty of rain the past month and now we have promise of 65% of full crop.—G. G. Black.

SOUTH DAKOTA.

Alpena, S. D., May 5.—Weather dry. Farmers are about as far along as usual for this time of the year.—Mason Smith.

Bard (Mitchell p. o.), S. D., May 4.—Spring has been cold and backward. Have not had a good soaking rain yet this spring. A little early for much rain yet, tho. Plenty of moisture in ground to start crop.—J. F. McLaughlin.

Rye Movement in April.

Receipts and shipments of rye at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Chicago	115,000	123,000	46,000	131,000
Cincinnati	16,800	21,600	24,000	27,000
Duluth	702,382	704,773	644,977	770,761
Ft. William	176,053	101,672	763,730	142,301
Galveston	.....	.....	205,731	214,594
Indianapolis	33,600	36,400	1,400	29,400
Kansas City	11,000	25,300	38,500	14,300
Milwaukee	162,725	209,850	182,180	165,188
Minneapolis	157,900	202,300	493,460	246,810
New Orleans	.....	.....	188,571	165,714
New York	582,400	137,200	965,000	254,000
Omaha	138,600	44,000	109,200	57,200
St. Joseph	1,500	.....	3,000	1,500
St. Louis	15,400	9,900	9,240	5,320
Texas City	.....	.....	85,714	.....
Wichita	4,800	.....	4,800	.....

Oats Movement in April.

Receipts and shipments of oats at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Chicago	3,734,000	4,269,000	5,071,000	5,192,000
Cincinnati	278,000	508,000	128,000	294,000
Duluth	2,016	190,345	2,016	10,000
Ft. William	3,265,147	6,059,758	4,403,653	4,826,738
Indianapolis	627,000	1,034,000	416,000	1,220,000
Kansas City	243,100	181,900	328,500	394,500
Los Angeles, cars	11	6	.....	.....
Milwaukee	846,400	446,000	1,433,925	710,395
Minneapolis	1,191,000	574,250	2,699,750	1,067,540
New Orleans	.....	.....	33,130	56,800
New York	2,516,000	704,000	2,258,000	75,000
Omaha	562,000	312,000	794,000	378,000
St. Joseph	54,000	36,000	128,000	26,000
St. Louis	1,294,000	1,518,000	1,349,000	1,324,665
San Francisco	.....	.....	.....	.....
tons	1,225	578	.....	.....
Wichita	3,000	5,000	3,000	5,000

Barley Movement in April.

Receipts and shipments of barley at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Baltimore	69,525	82,085	109,319	96,632
Chicago	327,000	595,000	207,000	329,000
Cincinnati	.....	.....	1,300	.....
Duluth	137,738	97,850	3,120	26,523
Ft. William	669,888	1,022,499	1,152,170	1,395,036
Kansas City	94,500	61,500	83,200	97,500
Los Angeles, cars	113	76	.....	.....
Milwaukee	505,600	663,600	212,200	647,805
Minneapolis	690,380	602,820	676,920	855,230
New Orleans	.....	.....	11,350	26,256
New York	215,600	534,100	291,000	291,000
Omaha	56,000	41,400	44,800	41,400
St. Joseph	10,500	20,250	5,250	1,750
St. Louis	25,600	35,200	9,260	5,430
San Francisco	.....	.....	.....	.....
tons	21,894	6,107	.....	.....

WISCONSIN.

Bowler, Wis., May 5.—All winter grains look splendid. Large acreage of potatoes will be planted this year.—E. J. Buettner.

Askeaton, Wis., May 4.—Crops are very backward. Farmers are not finished with their seeding as yet.—A. G. Wells Co., by agt.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

COLORADO.

Otis, Colo., May 5.—Lots of wheat moving; 5 cars leave here today; more loading.

ILLINOIS.

St. Peter, Ill., May 8.—This season's crop has been mostly marketed.—St. Elmo Mlg. Co. Elvtr.

New Milford, Ill., May 6.—Some grain left in this district; none moving at this time.—A. Ross, agt. Armour Grain Co.

Sutter Siding (Hopedale p. o.), Ill., Apr. 24.—No movement of grain. Only about 10% of the crop is in farmers' hands.—Farmers Grain Co., David Bender, mgr.

INDIANA.

Tipton, Ind., May 3.—Season very wet and little doing in grain business.—G. G. Davis.

Hortonville, Ind., May 8.—Very little grain moving.—Farmers Co-op. Co., F. T. Hinshaw.

Bloomfield, Ind., May 3.—Not much wheat moving from farms here, mostly all in.—Bloomfield Mill & Elvtr. Co.

Evansville, Ind., May 4.—It is not believed there is much wheat in the hands of the farmers at this time. There is considerable corn, however, in the hands of farmers who have been unable to haul it to the elvtrs. because of the bad roads.—C.

SOUTH DAKOTA.

Alpena, S. D., May 5.—Not much wheat in farmers' hands.—Mason Smith.

Wheat Movement in April.

Receipts and shipments of wheat at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Chicago	2,203,000	1,311,000	1,170,000	1,639,000
Cincinnati	285,600	240,000	238,800	211,200
Duluth	1,655,914	2,768,222	558,714	3,302,440
Ft. William	6,128,459	3,740,744	10,672,547	9,024,542
Galveston	.....	.....	644,000	5,066,248
Indianapolis	123,500	206,700	78,000	128,700
Kansas City	3,705,750	6,863,400	4,240,350	6,318,000
Los Angeles, cars	166	115	96,433	143,191
Milwaukee	100,400	149,850	191,200	4,032,110
Minneapolis	4,723,060	7,329,690	929,244	7,009,253
New Orleans	.....	.....	2,670,000	1,953,000
New York	1,652,000	2,210,300	1,731,800	2,008,800
Omaha	1,296,400	1,764,000	217,000	530,600
St. Joseph	737,000	844,200	1,331,660	2,797,515
St. Louis	1,422,225	3,262,437	.....	.....
San Francisco	.....	.....	.....	.....
tons	2,480	1,345	.....	.....
Texas City	.....	.....	56,000	.....
Wichita	951,600	1,400,000	400,000	750,000

Corn Movement in April.

Receipts and shipments of corn at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Chicago	5,482,000	4,863,000	6,268,000	6,469,000
Cincinnati	164,400	379,200	199,200	200,400
Duluth	449,081	187,774	408,086	891,121
Ft. William	4,046	52,082	4,446	67,148
Indianapolis	790,400	842,800	327,000	646,800
Kansas City	1,172,500	638,750	575,000	651,250
Los Angeles, cars	56	71	.....	.....
Milwaukee	1,108,250	708,150	2,925,528	1,330,230
Minneapolis	651,020	467,090	640,830	537,450
New Orleans	.....	.....	2,110,925	1,065,514
New York	1,207,200	281,400	2,321,000	1,227,000
Omaha	1,953,000	1,139,600	2,888,400	1,759,800
St. Joseph	754,500	408,000	621,000	492,000
St. Louis	1,196,000	1,365,000	1,211,995	1,231,045
San Francisco	.....	.....	.....	.....
tons	1,819	661	.....	.....
Texas City	.....	.....	85,715	.....
Wichita	62,600	25,000	11,000	10,000

Radiographs

HEBRON, NEB.—We installed a radio receiving outfit and are getting Omaha market reports.—Hebron Grain Co.

PLAINVIEW, TEX.—The Plainview Grain Exchange has installed radio apparatus for sending and receiving market reports.

THE MISTAKE must never be made of connecting the "B" battery with the filament circuit, or the tube will be burnt out instantly.

THE USE of radio equipment is being tried on trains in France as a means of avoiding repetition of the disastrous accidents of the past two years on the French railways.

THE Q R S Music Co., manufacturers of music rolls for player pianos, are now adding the manufacture of radio equipment to their activities. They will work under the Armstrong patent.

WHEN the steamer Leviathan is reconditioned, each of its 740 staterooms will be equipped with radio receiving apparatus, it was announced recently by A. D. Lasker, chairman of the Shipping Board.

THE BILL authorizing the Navy radio stations to continue receiving commercial and press messages until private companies are prepared to handle the business has been passed by both houses and a conference report has been agreed to by the two bodies.

THE RADIOPHONE is to be used by Col. L. W. Ainsworth, sec'y of the Des Moines Board of Trade, in his campaign for nomination for the office state treasurer of Iowa, it was recently announced. Col. Ainsworth, who is one of Iowa's original radio enthusiasts, was chief signal officer of the American Expeditionary Force in England during the war.

A RADIO SHOW will be held in Chicago this summer in connection with the Pageant of Progress Exposition on the Municipal Pier. It had been the intention to hold a show in Chicago earlier, but the American Radio Exhibitors Ass'n has agreed to postpone its plans. One feature is to be "the voice from the clouds," messages being delivered apparently from mere space and without radiophone apparatus.

Recommend Radio Control Measures.

The final report of the recent national radio conference was submitted to Sec'y Hoover Apr. 27. An advisory com'te of 12 to be appointed by the president to assist the Sec'y of Commerce in supervising radio communication is recommended. Half of the com'te would be government officials and half would be persons from civil and commercial life.

The report goes into detail on each of the subjects considered by the conference, and request is made for the enactment of laws to give the Sec'y of Commerce adequate legal authority for the control of the establishment of all radio transmitting stations, except amateur, experimental and government stations, as well as the operation of nongovernment stations. It is proposed, however, that whenever government stations are used for commercial traffic they shall conform to the regulations established by the Dep't of Commerce.

The report approved the allocation of wave lengths and hours of service. In case of conflict between transmitting stations as to wave lengths or hours, the recommendation was made that first consideration be given to the public not reached, or not so readily reached, by other means of communication.

Direct advertising by radio broadcasting service should be absolutely prohibited, the conference held, and indirect advertising should be limited under regulations imposed by the Dep't of Commerce.

Adulteration and Misbranding.

Under the Food and Drugs Act, the following judgments have been given in United States District Courts for the Bureau of Chemistry:

Bags of cottonseed cake shipped by the Houston County Oil Mill & Mfg. Co., Crockett, Tex., were not marked to show the quantity of contents. Fined \$50.

The Kerens Cotton Oil Co., Kerens, Tex., shipped cottonseed feed containing 40.13% protein, whereas the tags stated the protein content to be not less than 41.2%. Fined \$25.

W. P. Battle & Co., Memphis, Tenn., shipped cottonseed cake without stating the quantity of the contents of each package conspicuously on the outside. Fined \$25 and costs.

The Sherman Oil Mill., Sherman, Tex., shipped cottonseed cake in packages but failed to mark the quantity of contents of the packages on the outside. Plea of guilty was entered and fine of \$50 imposed.

The Dyersburg Milling Co. labeled dairy feed "crude protein, 24%," but analysis of sample showed that it contained 19.89% and 20.1%, respectively, of protein. Plea of guilty was entered and fine of \$50 and costs was imposed.

A shipment consisting of 55 sacks of corn was seized at San Juan, Porto Rico, and it was alleged that it consisted in whole or in part of a filthy, decomposed or putrid animal or vegetable substance. No claimant appeared and the property was destroyed.

Cottonseed meal labeled "manufactured for W. D. Hall Co., dealers, Atlanta, Ga.," was seized at Portland, Me. It was labeled "protein 36%," but analysis showed materially less than this percentage of protein. No claimant appeared for the property and it was ordered sold.

The Southern Cotton Oil Co., Columbus, Ga., labeled cottonseed meal "ammonia 7%, protein 36%, nitrogen 5%, fiber, max. 14%." Analysis of a sample of the article showed 5.32% nitrogen, 6.46% ammonia, 33.24% protein and 16.76% fiber. Plea of guilty was entered and the court imposed fine of \$100.

The Empire Cotton Oil Co., Atlanta, Ga., shipped mixed feed which, upon analysis, showed 3% crude fat, 26.6% crude fiber, 18.1% crude protein, 2.9% nitrogen and 3.5% ammonia. The tags indicated the analysis to be 3.2% nitrogen, equivalent to ammonia 3.9%, protein 20%, fat 4%, fiber 22%. Plea of guilty was entered and fine of \$100 imposed.

The Buckeye Cotton Oil Co., Little Rock, Ark., shipped cottonseed meal labeled to indicate 36% protein, 7% ammonia and 14% fiber. Analysis of a sample showed 33.8% protein, 6.57% ammonia and 15.31% crude fiber, and it was alleged that cottonseed hulls had been mixed with the product. Plea of guilty was entered and fine of \$50 and costs imposed.

Barley feed was shipped by the Culbert Milling Co., Minneapolis, Minn., under the label "Mx Ground Barley Feed." Adulteration was alleged on the ground that oats and weed seeds had been mixed with the product, damage and inferiority being thereby concealed. No claimant appeared for the property, and it was ordered destroyed.

The Stuart Grain Co., Schoolcraft, Mich., shipped carload of rye, and adulteration was alleged for the reason that it consisted in part of filthy, decomposed and putrid vegetable matter. Ernest L. Wellman, claimant, having agreed to brand and label the product correctly, it was released on payment of the costs and on execution of a bond in conformity with the Act.

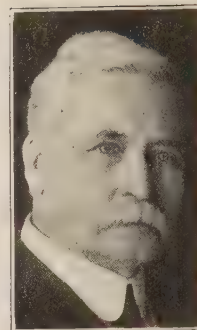
Peanut feed, marked to indicate manufacture by the Camilla Cotton Oil Co., Camilla, Ga., was alleged to contain less protein, less sugar and starch, and more fiber than the label declared. The property was released to the claimants who appeared for it on payment of the costs of the proceeding and the execution of bonds in conformity with the Act.

The Cunningham Commission Co., Little Rock, Ark., shipped mill feed labeled to indicate 13% crude protein and 11% crude fiber. Analysis of a sample showed 12.19% protein and 14.24% fiber, also that it was composed in part of rice hulls and contained no corn bran. Plea of guilty was entered and judgment for \$65.20 was entered.

Cottonseed meal shipped by the Empire Cotton Oil Co., Atlanta, Ga., was found on analysis to contain 34.1% protein and 14.48% fiber, and about 30% of cottonseed hulls. The tags attached to the packages indicated the analysis to be 36% protein, 10% fiber, and the ingredients to be cotton seed only. The company was fined \$100 when plea of guilty was entered.

Misbranding of cottonseed meal was alleged against the United Oil Mills, Arkadelphia, Ark., a shipment labeled to indicate 41% protein and 10% fiber having been found on analysis to contain 37.8% protein and 15.03% fiber. It was also alleged that the weight stated on the outside of the packages was not correct. Plea of guilty was entered and fine of \$75 and costs imposed.

B. B. Minor Dead.



B. B. Minor.

B. B. Minor, a grain dealer of the old school, passed away at Santa Ana, Cal., May 2, aged 81 years.

Mr. Minor was born on a farm near Lodi, Seneca County, New York, and taught school at the age of 17, working on the farm during the summer.

His first experience in the grain business was in an elevator at Champaign, Ill., in 1863, where during the winter of that year he was also principal of the East Side Public School, later going to Vicksburg, Miss., to work in a sutler's store.

Buying grain on the streets of Champaign was resumed in 1864 when he worked for Jonathan Bacon, and in the winter he sewed corn sacks out of doors with the thermometer hovering around the zero mark.

He took charge of the elevator of E. & I. Jennings at Effingham, Ill., in 1867, and two years later took a half interest in the firm, headquarters Mattoon, under the name Jennings & Minor. The business grew until they operated 8 stations on four lines of railroad. In 1883 he bought out the Jennings' interest in Southern Illinois.

Removing the main office to Indianapolis, Ind., in 1885 he formed the firm Minor & Cooper to run four stations in Illinois and did a general commission business until April, 1891. He was out of the grain business for three months while running the Union Flour and Linseed Oil Mills at Detroit, Mich., in which he had bought a half interest. Not liking this business he returned to Indianapolis and opened an office.

He went to Muncie, Ind., in 1893 and built an elevator, and later another at Oakwood, Ill. These houses he sold in August, 1919, having previously engaged in the grain commission business at Indianapolis as B. B. Minor & Son.

Mr. Minor made it a practice not to hedge anything to cover purchases in the country. During his long experience he became firmly convinced that continued cropping was taking some element of fertility out of the soil, as in the early years of his experience the corn was always good, while in the later years the quality was poor.

He removed to Santa Ana, where he died, in October, last year.

THE GROWTH of the radio industry is reflected in a production report of the Radio Corporation of America. During the first eleven months of 1921, the company manufactured an average of 5,000 vacuum tubes monthly. The output is now about 150,000 tubes a month, and this is expected to be increased to 175,000 in May and to 200,000 in June. The present demand came early in February, and if a surplus can not be built up by the present expanded production, facilities will be further increased.

WEATHER REPORTS by radio are now broadcasted twice daily by the Great Lakes Naval Station. It is designed to be of especial service to farmers, lake vessels and aviators, and it has been described by E. B. Calvert, chief of the forecasting division of the Weather Bureau, as revolutionizing the service, as it makes the information immediately available to a number of persons who could not be reached in any other way. He said that a census taken while the work of preparation was being done showed that in the year ending Mar. 31 the number of home receiving sets had increased from 60,000 to 600,000, and that the present rate of increase is 100,000 per month.

Illinois Ass'n Celebrates 29th Birthday

The 29th annual meeting of the Illinois Grain Dealers Ass'n was called to order in the Gold Room of the Jefferson Hotel at 10:00 a. m., May 9, by Pres. Fred. G. Horner of Lawrenceville.

Rev. B. G. Carpenter delivered the invocation.

Mayor Victor P. Michael welcomed the dealers to the city in a very happy address that won his auditors.

Pres. G. C. McFadden, of the Board of Trade, welcomed the dealers to the city in behalf of the local exchange and told of the first Illinois ass'n of shippers, its work and its collapse. He called attention to the high costs of transportation still handicapping the farmers and pointed out the opportunity of the Ass'n to work for the development of the Illinois river as the main avenue of freight transportation for Illinois.

President Horner thanked the speakers for their kindly welcome and proceeded to the presentation of his annual address, which follows:

President's Address.

One year ago a magnificent, awe inspiring, super marketing agency called the United States Grain Growers', Inc., was in process of organization, and today, without having handled a bushel of grain and after having mulcted the farmers of approximately a half million dollars up to Feb. 28th last, and incurred an indebtedness, at that time, of an additional \$200,000.00, this same super agency is in a corresponding state of disorganization.

We must admit that, at times, the very audacity of the scheme somewhat appalled even seasoned shock troops like ourselves, but to date our only casualties have been a few slight shell shocks. Such a situation as we have witnessed during the past year would appear almost incomprehensible to any sane man who is only slightly conversant with the grain business, but we must remember that sanity is a rare virtue these days and that even a slight knowledge of the intricacies of the grain marketing machinery is practically unknown outside of the trade itself.

During this period, we have been fed-up on co-operation. We have been surfeited with this talk of co-operation from self styled co-operators who have consistently refused to co-operate and who, if they had the slightest conception of the meaning of the word, have never exhibited any symptoms that would indicate the presence of such elementary knowledge. There is, perhaps, no word more abused and no word, if literally applied, which would more nearly furnish the panacea for our ills and verily engulf us in a millennium. Just consider the word for one moment, and then think how characteristic of this entire agrarian movement is the absurdity of applying to it the term co-operation. Co-operate. How could they co-operate with anyone? They could not even co-operate with each other.

I have no desire in any way to minimize the troubles of our farmer friends during this period of liquidation through which we have all just past, but I do wish to emphasize the fact that the responsibility for such maladjustments, as most of us think have occurred, should be properly placed.

I know that there is no other class of business men who have such an intimate knowledge of the problems of the American farmer as the grain trade and I know that from no other class does the farmer receive such genuine sympathy, such complete understanding, or more willing assistance, and this is true not only from the intimacy of his knowledge, but from the identity of their interests and, were it possible for the farmer to have a like knowledge of the grain business, I believe that the corps of professional agitators who have recently waxed so fat at the expense of the farmer would have an opportunity to exercise their talents in fields more honorable, if possibly not so lucrative and facile. It was with this idea in view that a meeting of the grain and allied trades was called at Cincinnati last June by the Grain Dealers National Ass'n, and, as a result of this meeting, a bureau was opened and funds were raised by popular subscription for the purpose of educating the farmers and the general public to the fallacies of this misnamed co-operative movement and the menace presented by the marketing plan proposed by the Committee of Seventeen wise men.

A Fight for the Farmer: Few would now have the hardihood to question either the advisabil-

ity of engaging in this effort at educational publicity or the results which have been attained by that campaign, and any attempt at defense would now be an insult to your intelligence, but I desire to refute one objection that has frequently been made and that objection was that it was a mistake to fight the farmer. Gentlemen, the man who made such an objection, refuted his own statement by his display of ignorance.

It was a fight, and I use the word advisedly, against the insidious propaganda which was being fed to our farmer friends and it was a fight against the horde of mercenary agitators who, for the sake of the few paltry dollars which they could annex to themselves, were willing to plunge the entire farming community into chaos, without a thought of all the ruin and desolation that would ensue. It was a fight against a band of as ruthless buccaneers as ever gathered under a black flag.

Apparently, outside the grain trade, no one realized the imminence of the danger and, personally, I thank my stars that the grain dealers did not stultify themselves by clamoring back into their dugouts, but that they, to a man, went over the top and, without a waver, rushed the first line defenses and are still at it. We never need apologize for being right and if there were ever any question as to whether we were right, the developments of the past few weeks have banished every doubt and literally confounded our opponents.

No one more fully sympathizes with the farmer in the losses he has suffered and the difficulties he has undergone than we, ourselves, but we have long known what the farmer has only recently begun to realize and that is that the farmer's losses were only a small part of the cost of liquidation and were in no wise out of proportion to the losses sustained by the grain trade and the members of the countless other branches of business activities. In fact, in proportion to the investment, the losses of the grain trade in Illinois far exceeded the losses of the farming community.

Next to the grain trade there has been no more frequent target for these what ex-Senator Beveridge has so aptly termed "those uninformed and incessant demagogues, whipping up, and then pandering to the passions of the multitude" than the meat packers, yet we have recently had such revelations as a deficit, for the past year, of Armour & Co. of, in round figures, \$35,000,000.00; Swift & Co. over \$19,000,000.00; Morris & Co., \$12,000,000.00; and Wilson & Co., \$9,000,000.00.

As to the advisability or feasibility of Henry Ford's Muscle Shoals proposal I am not in any way concerned, but of more importance to you, of more importance to the farmer, and of more importance to every other citizen of the United States is the fact, which you know, which the farmer knows, and which every citizen of the United States knows, and that is that this proposal would not have received the almost unanimous and spontaneous support of the Agricultural Bloc and the various farmer's organizations, if this appalling bounty of our government had not presented the pretext to these agitators of securing the prestige of an ostensible benefit for the farmers at the expense of the general body of taxpayers.

Professional Agitators: One of the natural results of the persistent encroachment of our various governing bodies upon the formerly private habits and personal activities and individual business affairs of our citizenship has been to bring into being a class of professional agitators, or propagandists, who focus their activities on the organization of associations for the furtherance of some idea which has been espoused, not so much from its inherent merit, as from its revenue possibilities.

In many cases the apparent object may be most commendable, but most often the abuses incidental to its accomplishment far overshadow any possible general benefit, and, today, our body politic is honeycombed with a mass of organizations and associations, which, although supported and munificently financed by citizens of the best intentions, are, by hook and by crook and, often, by methods nothing short of blackmail, so intimidating the members of our various branches of government that any man who desires to remain in public service can no longer continue a free agent, and statesmen, of a caliber who are able to cope with our national problems and who have the stamina to fight for their convictions, are being supplanted by a band of opportunists, who are grinding out a mass of freak and class legislation, which is the bane of our existence.

Agricultural Credits: We have heard a great deal about the discrimination against the farmer in our credit system, and we have just witnessed a series of onslaughts against the federal treasury in the interest of the agriculturists by the Agricultural Bloc, or the Ken-Clap-

Klan, as it has been aptly termed. But what is the truth of this matter? Even the most casual investigation will convince anyone that the credit facilities available to the agriculture class is far greater than that offered to any other class on corresponding collateral and that instead of being deficient, it is actually excessive. This is proven by the fact that during our recent stringency the greatest mass of frozen credits was found in the agricultural Federal Reserve Districts and, further, that the credits in these Districts were the last to be thawed. The truth is that, had the farming communities not been furnished with excessive credits, we would not have had the wild orgy of speculation in \$500.00 land and the resulting collapse.

There is no class in the United States, which, in proportion to assets, receives the extent and the length of mercantile credits which is given to the farmer. This is true, perhaps, because, as a class, he is more substantial and he has demonstrated himself to be more worthy, but it is true, nevertheless. The fact that at your local banks farmer paper is always given preference is so well known as to need no comment.

In addition, he has available special facilities in a long string, such as the Joint Stock Land Banks, Federal Land Banks, Insurance Companies, Farm Mortgage Banks, temporary relief measures, such as the War Finance Corporation; and various other agencies both public and private. No, the real trouble is that all these are predicated on proper security being furnished and what is wanted are limitless facilities for extending credit without adequate security.

This entire movement is based upon class consciousness and class cupidity. I will admit that it was preceded by legislative preferment to other classes, such as the Adamson Law and a long string of indefensible labor legislation, but two wrongs never made a right and the solution is not by the proposals to which we have been listening, which in effect only compound the injury, but it is the repeal of the injustices which have already been crystallized into statutes and customs, and to accomplish this we must have co-operation and co-operation in the true sense of the term, and for such co-operation there will be found no stronger supporters than the grain trade, both as individuals and as represented by their organizations.

It is a fact in which every member of a grain trade Association should take the greatest pride that, in happy contrast to the actions of the Agriculturists, nowhere, at no time, have any of our organizations spent one dollar or one effort for securing any legislation conferring the semblance of special favors upon the grain trade. On the contrary, whenever any of our representatives have appeared before legislative or administrative bodies, it has been only in defense of our inalienable rights as American citizens, and the frequency with which we have been compelled to thus appear is a sad reflection upon the injustices of the recent conduct of our government.

The American farmer should remember that he has never been condemned to agricultural pursuits except by his own selection and, if he has elected to till the soil for a livelihood, it is palpable that for some reason, whether possibility of gain or desirability of occupation, this vocation has been chosen by himself, and that the possibility of change is always open. Contact with the soil does not confer any special virtue. The farmer is a citizen of the United States and, so long as he complies with his obligations as such, he is entitled to every right and privilege of such citizenship, the same as the grain dealer and every other law-abiding citizen.

Special Privileges: While we will seriously question the advisability of the farmer, either individually or collectively, engaging in the grain business, no one will question his right to do so, so long as he does not conflict with the laws of the land or attempt to secure special class legislation to avoid such a conflict, but we are unalterably opposed to legislation exempting the farmer or any other class from the operation of the anti-trust laws or the extension of any other special privileges, whether conferred by legislation or by the administration of departments, such as has so consistently characterized the action of the Department of Agriculture.

The Awakening: It would seem that we have gone a long way in the past year and that we have accomplished much, and that we can look forward to the coming year with a great deal of hope. I firmly believe that there has been a great awakening by the general public, as well as by the farmers, themselves, to the fundamental problems regarding which there was such appalling ignorance only a year ago, and I think that we can discern on every side more eagerness for real co-operation and less response to cries of distrust and class misunderstanding. Strange as it may seem, I believe that even our County Advisors have imbibed a whiff or two of this changed atmosphere and that the coming year will see their activities somewhat more confined to their proper field of education and research.

Do not permit these glimpses of success to lull you into any fancied security; rather let us

renew our efforts and let us give our associations such increased support as will hasten and doubly secure that victory for real co-operation and defeat for that class mistrust of which we have, so long, been the innocent victims.

Our grain trade associations are not only standing for, but are fighting for, and, in their aspirations, beautifully typify the fundamental principles which are the bulwarks not only for the preservation of this country but of civilization itself and never hesitate to furnish not only your financial support, but your moral support as well. With the exception of our Secretaries, none of our officers receive one dollar of remuneration in any manner, shape, or form, and when the paltry expenditures of our state and national ass'ns are compared to the lavish salaries and prodigalities of the various agricultural organizations, we must realize that our only hope of success is in our firm conviction that truth and right will prevail.

R. I. Mansfield, chairman of the Special Executive Com'te of G. D. N. A., reviewed the causes leading up to the organization of the com'te and the work of the com'te. The daily and weekly press being closed to the com'te it sent personal letters to 200,000 prominent farmers advising them to read closely and be careful, so when the solicitors approached these farmers, they refused to sign until the U. S. G. G. was marketing grain.

The farmers were asked to sign this contract. It is only 21 feet long [laughter], but they refused. Today the U. S. G. G. has not marketed a single car of grain yet it has spent thousands of dollars collected from farmers and still owes \$325,000.

It has failed, but other ass'ns will come into the field and again mislead the farmers unless you grain dealers get next to the grain growers and make clear to them the efficient work of the present grain marketing machinery. They want more light on this subject and it is your duty and mine to enlighten them. We must satisfy not only the grain producer but the lawmakers that our present system of marketing grain is the most efficient and the least expensive of any machinery for marketing commodities in this country.

The hearing before the U. S. Senate Com'te is about closed. The last evidence was a series of audits of Gustafson's sad children in Nebraska, the last and the largest in South Omaha, which is only \$400,000 to the bad.

The attorney of the U. S. G. G., who has been drawing \$45,000 a year from different farmer organizations, is seeking the nomination to the U. S. Senate from Iowa.

The cooperative elevators were the principal sufferers from these agitators. They were coerced into signing.

We have a perfectly legitimate business and we have nothing to hide. Let us come out into the open and tell the whole truth and nothing but the truth. The investigations of the Government show that grain is handled on a narrower margin than any other commodity. We must take our farmers by the hand and enlighten them on the existing methods of marketing their grain.

President Horner appointed as a nominating com'te H. A. Hillmer, Freeport; L. H. Blankenbaker, Sidney, and Frank Ware, Butler.

Resolutions: H. A. Rumsey, Chicago; C. C. Miles, Peoria, and Adolph Gerstenberg, Chicago.

Sec'y W. E. Culbertson, Champaign, read his annual report as follows:

Secretary's Annual Report.

Since our last Annual Meeting we have passed through one of the most severe periods in the history of the Grain Trade, and certainly a most trying one for our Association. However, with the Lantz Bills defeated, the Capper-Tincher Bill, though passed, so modified it is not a menace, the Department of Agriculture changing its attitude as to what should constitute the proper activities of the County Agents, and with internal troubles fast disrupting the U. S. Grain Growers, Inc., I feel that we are getting over the tendency towards Socialism and Class Legislation and that in a short time it will no longer be possible for every little group of citizens with a fancied grievance or a theory to run to our state and federal government and secure the enactment of laws for their relief. In fact, I am convinced that the American Public is getting back to normalcy, and that we and others will be allowed to conduct our business in peace and in accordance with economic laws.

During the year I have traveled nearly twelve thousand miles via auto visiting our members and attending local meetings, trying to explain the folly of signing the elevator contracts that were being urged upon the dealers by the U. S. Grain Growers, and it is very gratifying to report that but few of our members have signed.

Our membership shows a slight loss due to the great number of receivers in various terminals having resigned or suspended business on account of general business conditions. However, we still have more than five hundred, and with little effort on the part of these, our membership could be materially increased. Membership in the Illinois Grain Dealers' Ass'n includes without additional cost, affiliated membership in the Grain Dealers National.

The Arbitration Committee has had but three cases during the year, all other misunderstandings being adjusted without resorting to arbitration, which certainly speaks well for the business honor and integrity of our members.

The Claim Bureau has suffered with all other business, handling less than fifty percent of the number of claims of former years. The loss in revenue from this department has been severely felt, but it is a pleasure to know that in these times of little or no profit our members are freer from loss and damage claims. This is due almost entirely to the fact that there has been no car shortage, and the railroads have furnished better cars for grain handling.

The Scale Department has continued to grow in popularity and it is very pleasing to report that more scales were inspected the past year than ever. Our inspectors have equipped themselves with Special Ford Trucks and make regular trips to nearly all sections of the state. They are now preparing to start this year's trip and owing to the large territory that must be covered, I urge members to advise the inspector promptly as to their wishes in the matter of testing their scales as soon as notice is received he is coming into your territory. This is especially important as the last session of the General Assembly passed a new Weight and Measure Act making it mandatory upon all buying and selling merchandise in the state to have correct weighing devices.

The publishing of the last issue of our Annual Directory, which lists all dealers in the state, entailed no small amount of work and took nearly three months to secure the necessary advertising to print and distribute without cost to the Association.

I have at all times tried to conduct the affairs of the Association to the best of my ability and to maintain the efficiency of the Association, and I am indeed grateful to our entire membership for their loyalty and sup-

port. I desire at this time to convey my thanks to all for the many considerations and kindnesses shown me.

The financial statement of the Association for the year ending May 1st shows:

RECEIPTS.	
Bal. on hand May 1st, 1921.....	\$ 2,092.66
Membership Dues	5,644.00
Membership Fees	66.00
Arbitration Fees	101.32
Advertising in Directory	1,936.70
Claim Fees	437.54
Scale Fees	386.51
Sale of Directories	48.00
Scale Repairs	21.65

Total \$10,734.38

DISBURSEMENTS.	
Office Supplies	\$ 78.40
Officer's Expense	212.41
Postage	361.76
Annual Convention	138.10
Rent	245.00
Refund	30.00
Telephone, Telegraph and Express....	155.56
Salaries	4,895.00
Secretary's Expense	1,398.40
Directory	956.00
Dues to National Ass'n.....	302.00
Printing	180.25

Total expenditures \$ 8,952.88

Bal. on hand May 1st, 1922..... \$ 1,781.50

M. J. Porterfield, Murdock, read the Treasurer's report, which agreed with the Secretary's financial report, all of which was confirmed by the report of the Financial Com'te read by the Secretary.

Adjourned to 1:30 p. m.

Tuesday Afternoon Session.

President Horner called the second session to order at 2:15 and introduced the Hon. Geo. C. Gale of Galesburg, who in the course of an interesting and instructive address on Taxation in Illinois, warned the dealers of the necessity of taking more active interest in government lest overtaxation wreck it as has been done in the case of other governments in the past. Approximating the income of the citizens of Illinois at three billions annually, Mr. Gale showed that they were paying \$700,000,-000 in state and local taxes.

He insisted that real property should bear 50% of the expense of government. Your new constitution will seek to establish a tax on the income from personal or intangible property in lieu of the present attempted taxing of such property. Taxes on incomes shall be collected by the state government, not by the locals. Nine-tenths of the delegates to the Constitutional Convention are in favor of prohibiting the issue of tax free securities, but inasmuch as we are limited to Illinois securities we did not dare to discriminate against home securities while Federal securities and the issues of other states were beyond our reach.

The capital stock tax is in a measure double taxation. The aggregate volume of such taxes should never exceed the actual expenses of the department regulating the corporations.

J. B. Sowa, Chief Scale Inspector of the Ass'n, read from the Illinois Weight and Measures Act and warned the dealers that they must comply with the law or do without their scales when most needed.

Our dept. has been inspecting and repairing your scales for years until now we have four



First Section of Photograph of Some of the Dealers Attending Meeting of Illinois Ass'n at Peoria.

inspectors traveling much of the time. When we start in to inspect your scale we stay with it until it is in good condition. The state inspectors will simply check up the work of the scale and permit or deny you the right to use the scales.

A good scale merits a heavy concrete foundation. Too many high grade scales are set in a hole in the ground. One of the greatest enemies to correct weight is rust, so I plead with you to drain your scale pits and cover them so as to keep water away from the scale. Protect your scale and you will prolong the life of it and guard your business against incorrect weights.

See to it that the approaches to your scale platforms are of uniform pitch. If the horses stand above the platform when the gross weight is obtained and below when the tare is determined the net weight is not likely to be correct.

The state will inspect your scales regardless of any seal its inspectors may find on the scale.

W. P. Carroll, Federal Supervisor of Chicago, read the following paper:

Federal Grain Grades.

The grain standards Act has now been in operation for 5½ years. The Act provides for four things, to-wit: (a) establishment of grain standards; (b) licensing inspectors; (c) supervision of grain inspection, and, (d) referring of appeals to the Secretary of Agriculture. Standards have already been established for corn, wheat and oats. Standards for rye, kaffir and rice are tentatively promulgated, and the standards for the two latter have been adopted in localities where these grades are important to the trade. Barley standards are just about ready to be submitted to the public for criticism.

In December, 1916, there were 267 inspectors; today there are 425 licensed inspectors, an increase of approximately 58 per cent. During the 5½ years, 37 licensed inspectors have been formally cited to hearings for misgradings or misconduct, and in 35 cases the charges were sustained and disciplinary action taken. Before the Act became effective, there were but 65 places in the United States where grain was inspected; today there are 137 such established places, and in addition there are 28 more places where inspection service is given if desired. This is an increase of over 150 per cent in places where grades may be obtained on grain. This 150 per cent increase in inspection points is quite probably due to the fact that the grain trade has found it possible and advantageous from a marketing standpoint to establish and utilize inspection facilities in the interior points which have heretofore not had the benefits of impartial and stabilized grain inspection that would be generally accepted elsewhere. In passing it may be said that new inspection points are continually increasing in number, and but few are being discontinued. The existence of these inspection points makes it possible for nearly 90 per cent of all grain entering commerce to be sold by grade and have the same graded by licensed inspectors.

Supervision: The United States is divided into over 30 supervision districts, each of which has one or more inspection points and inspectors. These offices are directly responsible to the main office of Federal Grain Supervision in Washington and to General Field Headquarters located in Chicago.

The local district supervision offices secure samples of grain promiscuously in each market and around the district and ascertain whether these samples have been properly graded by the licensed inspectors. Where these lots of grain are unquestionably misgraded, the district supervisor calls the misgradings to the attention of the inspector. Should these misgradings con-

tinue, disciplinary action is taken against the inspector.

The district supervisors are directly responsible to General Field Headquarters of Federal Grain Supervision at Chicago for the proper application of standards as interpreted by the Board of Review.

The factors involved in interpretation are damage, heat damage, colors in corn, color and texture in wheat, general appearance in oats, and class in wheat and oats. The local supervisor is therefore the intermediary or reflector of the official interpretation. Each sample of grain upon which the inspector and supervisor disagree must be forwarded to General Field Headquarters for final grade, and in addition not less than 20 per cent of all samples obtained by the supervisor must be forwarded to General Field Headquarters, whether or not the grades agree with the inspector's grade. Supervision from the nature of things does not cover all inspections, due to volume of grain involved and the small personnel of the federal grain supervision.

The grain standards Act provides that if any interested party to a transaction in grain by grade is dissatisfied with the grade assigned by the licensed inspector, he may appeal from this grade to the Secretary of Agriculture through the district supervisor, for a change in grade. In order that this service may be readily available, supervision offices are located in nearly all cities where any considerable amount of grain is merchandized.

Furthermore, the appeal fee is reduced so low that some inspectors charge more for an inspection than the Department does for an appeal. This low cost of an appeal is made to make the expense of an appeal no consideration in securing correct grading. It is believed fitting at this time to give a few statistics showing how this service has grown. At the close of the fiscal year 1918 there were 1457 appeals; in 1919 there were 6652; 1920, 10960; 1921, 11617; 1922 to date, 22000. This increase in number is largely due to the buying and selling of grain on federal appeal grade, sometimes erroneously spoken of as federal inspection. Strictly speaking, there is no such inspection as federal inspection. What is really meant is that federal standards are first applied by a licensed inspector whose grade is then referred by one of the interested parties to the local supervisor for an appeal from the inspector's grade.

When grain is loaded close to the "line" the purchaser has more assurance, with an inspector's grade and a supervisor's grade, that he is receiving the grade which he purchased than if he had only the inspector's grade. Many cargoes along the Great Lakes have been and are being appealed, and a single appeal frequently represents 250,000 bushels of grain.

At present there are several inspection points somewhat distant from the district offices of Federal Grain Supervision. If an appeal is filed against the grade assigned by the licensed inspector in one of these distant points there is some delay before the supervisor reaches the grain, and besides there is considerable expense involved. It is now the plan to urge interested parties located in these places to submit an agreed sample to the district supervisor with the approval of the inspector. This system will reduce the delay in securing the final grade over 50 per cent, and furthermore, reduce the traveling expense which the Department must now bear. All that will then be necessary to secure quick service will be to send the sample and all the required papers by parcel post, special delivery, and the supervisor can notify the interested parties of the final grade by telegram.

Shippers of grain should always examine their shipments before releasing the cars. The standards are so simple that, with a little effort any experienced grain buyer can grade his own grain if he takes the trouble. The receiver at destination can then promptly notify the shipper as soon as the grain is inspected as to the grade at destination. The shipper will then know what further action to take. On the other hand, if the shipper has not tested out his grain before shipping, he will be unable to act in-

telligently if he has not received expected grade.

The cause of much unsatisfactory grading and different grades assigned to the same lot of grain may be largely attributed to uneven loading of cars, and the placing of different qualities of grain in the bottom of the car, which cannot be easily reached until the car is partly unloaded at the elevator. Inspectors and samplers, in their haste to render service, that is to say, getting the grain inspected to reach the Exchange floor early, and at the same time to relieve the owners of demurrage charges, assume that the grain has been evenly loaded, unless something is readily apparent to the contrary. It is almost impossible to reach the bottom of a heavily loaded car, or even some of the larger cars merely loaded to capacity, unless a great amount of time is consumed.

Neither the inspectors nor the supervisors have any interest in the grain upon which they are asked to assign a grade, other than assigning the proper grade. They cannot be interested in local rules for discount, nor in pay for dockage. They must assign the grades as they find them by actual determination. The Department, however, is always pleased to have constructive criticism as to the operation of inspection standards and any method that will render better service.

The suggestion of questions for Mr. Carroll resulted in a shower, but he stood the long grilling good-naturedly.

A State Police for Illinois was urged by F. L. Mather of the State Police Auxiliary Committee of Chicago. He pointed out that a State Police will give protection to farmers' families and farm property, save the state thousands of dollars in road repairs, by reason of preventing their destruction on account of overloading trucks, make it too hot for bandits who are now masters of the highways, suppress riots and disorder, give aid in flooded districts, to victims of cyclones and railroad accidents, also in times of epidemics of disease, and, in fact, do the big police work of the state.

An important feature of his address was his explanation of how State Police organizations are made models of freedom from political domination, which, he said, results in these organizations being the most efficient police forces extant.

Adjourned to 9:30 Wednesday.

Wednesday Morning Session.

The third session was opened by Pres. Horner with the introduction of Jno. B. Maling of Chicago who addressed the dealers on "The Cause and Effect of Freak and Class Legislation." He said the initiative and referendum, the headless ballot, the direct primary, the I. W. W., the Non-partisan League and many other attacks on our form of government have come out of the West, where are found few students of government.

About 25 years ago there began an agitation to get away from the limitations of our Constitution. If the mob spirit now dominating our people continues we can not expect our government to survive 25 years longer. The class legislation exempting this body and that from laws which others must heed is a direct attack on our Constitution. If our nation is to survive all our citizens must get back to the philosophy of the founders of our government. You must become close students of representative government if you wish to save your



Second Section of Part of the Dealers at the Peoria Meeting.

country from the agitators who persist in pushing socialistic doctrines upon our people. The agitators and the newspaper writers are promoting the cause of sovietism in America.

Our representatives in Congress closed our doors to the skilled laborers of Europe who were under contract and thereby encouraged the ocean steamship companies to plaster Europe with posters telling of the wonderful opportunities in the United States, so for many years we were flooded with the scum of Europe. We can not assimilate so much poor material. The average intelligence of our citizens has been lowered to an alarming degree.

The enactment of the Adamson law was one of the steps backward that we will long regret. That law alone increased the cost of labor to the railroads to more than had previously been paid for labor, taxes, interest and dividends and you must pay the bill. This bill forced through Congress by the labor leaders has done more to discourage and check corporate enterprise than any class legislation previously enacted. The presidents and executives of the railroads waited eight days for a chance to make clear to President Wilson what would be the effect of such a law, but he refused to listen to them. Washington is so overrun with agitators, the weaklings supposed to represent us in Congress have not the backbone to stand out against their impractical experiments in government. For the time being government by blocs seems to have displaced government by parties. Our future depends upon the activity of the intelligent citizens who understand the underlying principles of government.

Henry A. Rumsey, Chicago, in behalf of the dealers, presented President Horner with a beautiful Howard open-faced watch in recognition of his long service in the interest of the Ass'n.

Geo. A. Wells, Des Moines, Ia., led the discussion of Railroad Leases and Rental Charges with an address from which we take the following:

Railroad Elevator Site Leases

Several years ago the Interstate Commerce Commission made an investigation of the relations existing between large grain handling corporations and the railroads and found that valuable leases covering such property as large terminal market grain handling elevators were granted at a nominal rental charge and the Interstate Commerce Commission considered such nominal rental charges as being in the nature of rebates and ruled that all railroad leases of right-of-way and station grounds should be on a fair rental basis that would give reasonable return on the value of the property so leased and that there should be no discrimination as to such rental charges.

Originally the rental charge for an elevator site was uniformly nominal, some of the railroads charging as low as \$1.00 per annum, varying with the different roads from \$1.00 to \$5.00.

Following the ruling of the Interstate Commerce Commission, the railroad companies resurveyed their station ground into lots and parcels and fixed the rental charges at from 5 per cent to 6 per cent of the appraised valuation, making \$5.00 per lot or parcel as the minimum rental for elevator sites.

A large percentage of the country grain elevators are located at small country stations and in fact many of these stations are nothing more than sidetracks located for the convenience of loading grain and livestock and the land has an actual value of practically not more than farm land in the locality, so that \$5.00 minimum rental charge for a lot or parcel of such land would yield in fact a very large return on the actual investment and certainly when the rental charge is increased to \$60.00 or more for such lot or parcel the revenue from the investment is far beyond reason and entirely inconsistent with the ruling of the Interstate Commerce Commission.

The rental leases for elevator sites including arbitrary conditions that are unreasonable and inequitable. For example: "That the tenant will exercise such precautions as shall adequately protect the buildings and structures and all property of whatever description situated on premises against all damage to which they may be exposed from fire by reason of the proximity of said premises to the railroad operated by the lessor, and the movement or use of locomotive engines upon its tracks; the risk of all loss, injury or damage by fire, however caused, and whether or not caused by the negligence of the lessor, its Agents or servants, and the lessee agrees to indemnify and save harmless the lessor from all liability from damage by fire, however the fire may originate."

The grain dealer is also required to save the railroad company harmless from any liability, loss, cost, injury or damage which may be incurred caused by fire which shall damage or destroy any car or contents of same while such car or cars shall be moved or remain on any tracks or track of the lessor provided such fire originated on the leased premises or is tributary to the occupancy thereof by the lease.

The lessee further agrees that he will release fully and keep the lessor harmless and indemnify it from any or all liability or claims for damages or act of loss or injury to the property or person of the lessee or its Agents, servants, employees, licensees, tenants, leasees, patrons or the agents, servants or employees of such patrons attributable to the operation of engines, cars or other equipment upon any sidetrack, industry or other track connecting the said leased premises with the main line of the lessor or located on any part of the said leased premises.

A country grain elevator located on railroad right-of-way is a freight accumulating, storing and handling facility established as a private enterprise for the convenience of the railroad company and in most cases thus recognized by the carriers as the establishment of such facilities by private enterprise is solicited by the carriers as a necessity for their own convenience as well as the convenience of the farmers, the bankers, the merchants and the general public.

In granting leases for elevator sites the railroad companies require that elevators of certain minimum capacity be erected in order to provide ample storage for farmer's deliveries of grain during periods of car shortage for the convenience of the carrier, but no compensation is provided for the elevator owners for such service. It is true there are times when in the natural course of business grain may be held in store and earn carrying charges, but conditions as a rule do not always give such an opportunity so that in fact the holding of grain in country elevators on account of car shortage for the convenience of the railroad company is an extremely hazardous business.

The term conditions of the railroad lease for elevator sites reserve the right to terminate a lease at any time by giving thirty days notice, which is absolutely inconsistent and unreasonable.

In 1913 the Legislative Committee of the Western Grain Dealers Ass'n., of which I am secretary, prepared a Bill which was enacted and is known as Section 2110 of the Iowa Code Supplement of 1913.

Disputes have arisen between the elevator operators at Stacyville, Doris, and Osage, Iowa, and the Illinois Central Railroad Co. as to what constitutes the reasonable rental value of those parts of the right-of-way leased to and used by the several complainants as elevator sites. A petition prepared by the Iowa State Commerce Counsel, Judge Henderson, was filed with the Iowa Board of Railroad Commissioners in behalf of these elevator operators, the Western Grain Dealers Ass'n. co-operating in the matter.

The rental charge by the Illinois Central Railroad Co. for the lease of elevator and coalshed sites which had previously been \$12.00 per annum, that was originally \$5.00, was increased to \$85.00 per annum, and the rental for other leases was increased accordingly.

No other railroad company operating in the State of Iowa has as yet attempted to charge grain dealers who operate elevators located on the usual station sidetracks for the maintenance and repairs, and to include same in the rental charge for the lease. In fact all other railroad companies except the Illinois Central Railroad Co. are practically complying with the ruling of the Iowa Board of Railroad Commissioners so far as the interest charge on valuation is concerned. There have been a few cases where the question as to reasonableness of valuation has been raised and the railroad companies have in some cases readjusted the valuation.

The Illinois Central Railroad Co. has so far as I know ignored the ruling of the Iowa Board of Railroad Commissioners and has succeeded in obtaining leases by grain dealers on their own basis which includes a rental charge for maintenance and repairs of sidetrack.

A country grain elevator is a quasi-public institution. It is in a sense a part of transportation established for the convenience and welfare of the railroad company. The carrier was permitted to acquire the land occupied by the railroad only for transportation purposes and is not entitled to a rental charge on an unrestricted basis. The carrier is not entitled to include in the rental charge the investment in trackage or the expense of maintenance of such trackage as the Illinois Central Railroad Co. has attempted to do. No rental charge is required of stock shippers or teamtrack shippers, and in many instances the same tracks are used on which the elevator is located. In fact the reasonable proposition would be that the carrier should pay the elevator operator a handling and storage allowance.

Country grain shippers organizations should take a positive stand in this matter and insist that elevator site leases should be upon the basis of a fair rate of interest on a reasonable valuation, and in paying a reasonable rental that the arbitrary and unreasonable conditions that are now included in the elevator leases be eliminated.

C. C. Cameron, G. F. A., Ill. Cent. R. R., thanked the ass'n for the opportunity of talking to the members.

The grain business is one of the oldest of callings, while the railroad business is one of the youngest, and we still have much to learn regarding transportation. In the beginning the railroads were anxious to attract new industries to their lines, hence sites were granted on the rights of way for a nominal sum in order to safeguard the title to the land. However, the increased cost of doing business has made it necessary to advance rentals. We can not put a lease thru our books of record for \$12.

However, we wish to be fair and whenever you have a grievance a full statement of the facts should be sent to the head of the department having charge of that part of our business.

I am here this morning under something of a misunderstanding as a division of the work of my office has placed the matter of leases and rentals in charge of another. However, we are now working on a new schedule of rentals to become effective July 1st which will result in a reduction that should prove very satisfactory to all renters of sites on our right of way.

The railroads and shippers have many interests in common and owe it to themselves to get together and iron out their difficulties.

Charles Quinn, sec'y of the National Ass'n, in addressing the dealers called attention to the army tests of the intelligence of 1,726,000 young men in the army; 43% had the intelligence of a child of 13 years; 22% had the intelligence of a child of 9 years. Only 12% had high grade minds. All had adult bodies. This, to my mind, explains why we have so many agitators preying upon the ignorant.

The G. D. N. A. opposed the U. S. Grain Growers, Inc., because its scheme for marketing grain was impractical and wasteful. Following the Cincinnati meeting the Grain Dealers' Nat'l Ass'n spent \$76,000, all of which has been raised and the bills paid. In fact, we have raised a small sum to continue our educational work. We threw \$22,000 of our money into a sewer; that is, we paid that amount for advertising in the farm papers who maligned and misrepresented our work in their editorial columns.

A bill known as H. R. 9952 has been introduced in Congress by Representative Summers of Washington to authorize the Sec'y of Agri. to establish uniform standards of classification, an inspection service, a system of adjustments of disputes and a system of approved dealers and handlers for farm products and for other purposes.

While this bill is aimed at those who deal in fruits and produce, it is only an entering wedge which is intended to include the grain handlers.

Another vicious bill known as S 3385 has been introduced by Senator Edge of New Jersey.

This bill is intended to give the Federal Trade Commission complete control of the business interests of the country unless these industries withdraw from all trade organizations. This is actually proposed in this land of the free. If enacted your ass'n could not hold a meeting such as you have here without sending advance notice to the Federal Trade Commission and permitting it to send a representative to attend all sessions. None of your com'tees or board of directors could hold meetings without notifying the commission.

Resolutions.

H. A. Rumsey, chairman of the Resolution Com'tee, presented seven resolutions, five of which were adopted:

A vote of appreciation and thanks was extended to the members of the Peoria Board of Trade for the entertainment and many thoughtful courtesies.

An encomium praising the unselfishness of ex-Treasurer Wm. Murray, now deceased and expressing the ass'n's appreciation of his faithful service to the trade was adopted.

A resolution to amend the rules of the Ass'n so that any of its members who have been expelled from the Grain Dealers National Ass'n or any of its affiliated bodies shall be automatically expelled was adopted, but the by-laws were not amended.

CORN GRADES.

A resolution calling upon the Sec'y of Agri. to make the following changes in the rules governing the grading of grain was adopted:

1st. Whenever an inspector is in doubt as to the grade of any grain he shall make it the higher grade.

2nd. Reduce the grades of corn to four and Sample as follows:

No. 1 shall have not over 2% damage; No. 2 not over 5%; No. 3 not over 10%; No. 4 not over 15%, and all corn having more than 15% damage shall be graded Sample Corn.

YELLOW HARD WHEAT.

The discussion of the grading of wheat having made it apparent that the establishment of the grade of yellow hard wheat had brought considerable hardship to the producer and handler of wheat by reason of the seemingly undue discount the Sec'y of the Ass'n was instructed to correspond with the Sec'y of Agri. with a view to seeking the abolishment

of the grade known as yellow hard.

A resolution calling for the immediate building of a canal from Chicago to Grafton was lost by an overwhelming vote, while a resolution favoring the establishment of a state police was lost by a close vote.

The Sec'y presented a letter from Frank L. Smith, chairman of the Illinois Commerce Commission, outlining its policy by resolution which was published in "Letters" dept. of the Grain Dealers Journal for March 25th, page 380.

Election of Officers.

Frank Ware of the Nominating Com'te reported for President L. W. Railsback, Weldon; 1st Vice-Pres., C. E. Graves, Weston; 2nd Vice-Pres., B. L. Christy, Galesburg; Treas., M. J. Porterfield, Murdock.

Directors—F. G. Horner, Lawrenceburg; A. C. Koch, Breese; A. E. McKenzie, Taylorville; L. A. Tripp, Assumption, and M. C. Simpson, Woodford.

Mr. Railsback thanked the dealers for the honor conferred and promised to do his best to keep the work up to the standard of his predecessor.

Adjourned *sine die*.

Convention Notes.

From Bloomington, W. H. Barnes, J. W. McNoldy and R. C. Roberts.

From Baltimore came Edw. T. Sheil, Jr., treas. of the Baltimore Grain Co.

A splendid meeting. Program bristling with information of value to shippers.

The Illinois Seed Co. exhibited a large line of field and grass seeds in charge of C. D. Evans.

Decatur brokers in attendance included H. I. Baldwin, F. L. Evans, F. E. Hammon, J. C. Hight and D. M. Cash.

Fire insurance men in attendance: V. E. Butler, director, and J. W. Huntington, inspector of the Grain Dealers National Mutual Fire Ins. Co., and C. E. Sherman, gen. agt. of the Western Grain Dealers Ins. Co.

From Indianapolis came Wm. C. Hayward of Hayward-Rich Grain Co.; Lew Hill, Bert A. Boyd, Ed. K. Shepperd, W. J. Mercer, J. W. Jordan, E. M. Crowe, C. H. McEwan and W. K. Mannon.

The Peoria Board of Trade entertained all visitors at the Olympic Tuesday evening and on Wednesday took the ladies for an automobile ride over the city's picturesque drives and tendered them a luncheon.

Souvenirs included a ring puzzle, a fish story and a History of His Life, by Bert A. Boyd; a puzzle by P. B. & C. C. Miles, a calendar by P. F. McAllister & Co., matches by M. L. Vehon & Co., and a coat hanger by O. W. Randolph Co.

St. Louis delegation included S. A. Whitehead and H. T. Strawn, representing the Nanson Commission Co.; Jno. H. Herron of the Elmore-Schultz Grn. Co.; Geo. C. Martin, Jr., John J. Murphy, Ed. Hasenwinkle, G. A. Turner, T. C. Taylor and Frank Bubb.

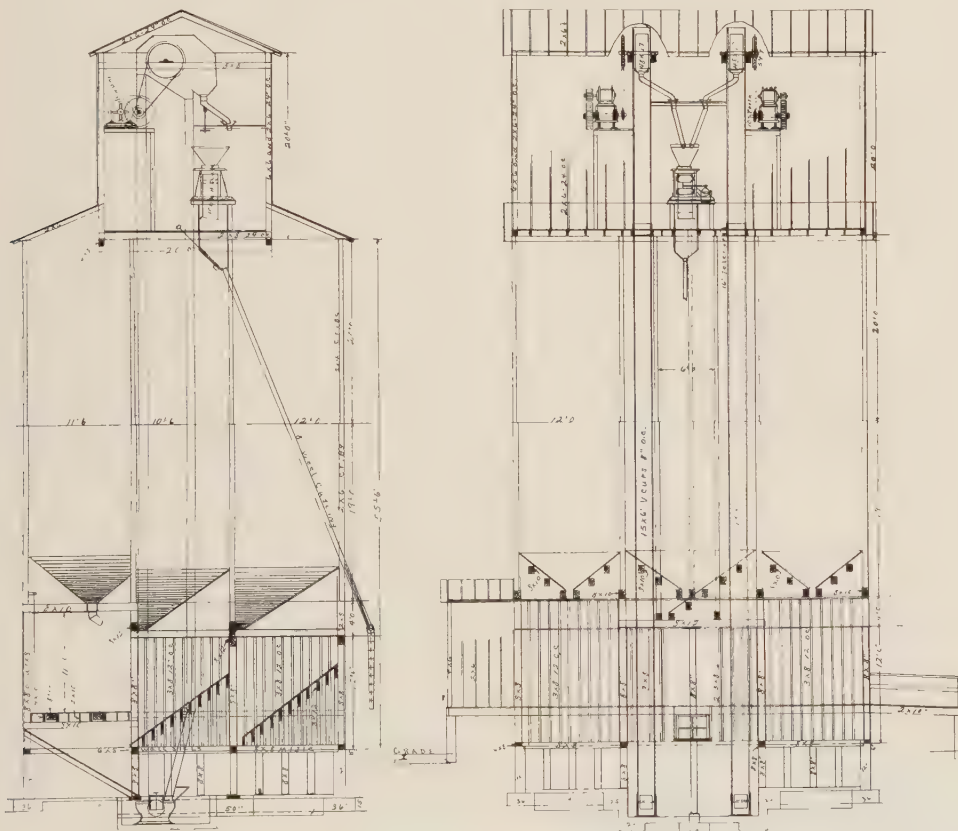
The supply men were out in force. P. F. McAllister represented P. F. McAllister & Co.; F. S. Harshbarger represented the Globe Machinery & Supply Co., and exhibited a model of the Globe Dump; J. Instone represented the Richardson Scale Co.; D. G. Eikenberry represented the Eikenberry Construction Co.; Geo. Saathoff and Henry Saathoff represented Geo. Saathoff. H. J. Steidley, D. B. Noyes and L. T. Feehery.

A Well-Planned Cribbed Elevator.

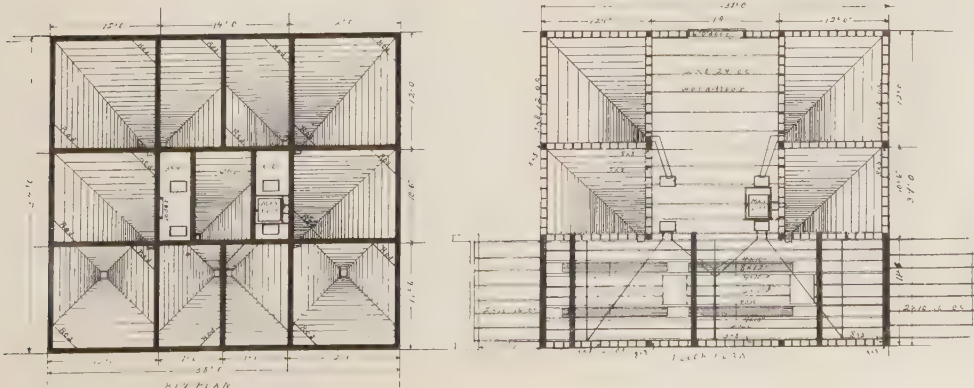
M. A. Kirk & Co. at Bondville have one of the largest rapid-handling elevators at a receiving station in Illinois, which any grain dealer should be proud to own. It is of cribbed construction, iron clad, the side walls being covered with 26-gauge copper galvanized steel siding and the roof with patent interlocking galvanized steel of 26 gauge. The house is 34 by 38 feet, 55 feet to the square. Its 11 hopper bins give storage room for 50,000 bushels. The cupola, which rises 20 feet above the square, is, like the full basement, well lighted and ventilated. The filled-in driveway with its heavy retaining walls assists in giving the entire plant a neat appearance.

The house is equipped with 2 rail dumps, each of the pits being hopped to the boot of an elevator equipped with 15 by 6 V shaped buckets, 8 O. C. Each leg is operated by a back-gear motor of 10 h.p., so that the grain can be removed from the wagon pits much faster than the farmers can dump it, and there is no waiting to unload at Kirk's elevator. Two improved distributing spouts facilitate the delivery of grain received to any bin of the house. The 10-bushel Richardson Automatic Scale in the cupola is used for weighing shipments. A safety manlift provides easy access to the top of the house.

The building is lighted throughout by electricity and is so conveniently arranged that a minimum of labor is required to handle a large volume of grain. It was designed and built by Geo. Saathoff.



Sectional Views Cribbed Elevator at Bondville, Ill.



Bin and Floor Plan 50,000-bu. Cribbed Elevator at Bondville, Ill.

Chicago was represented by A. E. Wood and J. A. Low, E. W. Bailey & Co.; Adolph and Ray Gerstenberg and Jack De Courcy, Gerstenberg & Co.; H. A. Rumsey, Rumsey & Co.; Geo. E. Booth and Wm. Tucker, Lamson Bros. Co.; E. A. Doern, Pope & Eckhardt Co.; J. E. Brennan, John E. Brennan & Co.; Eugene Schifflin, P. H. Schifflin & Co.; Wm. Thayer, Hitch & Carder; H. W. Brush, Requa Bros.; M. E. Miner, Armour Grain Co.; H. R. Sawyer, J. H. Dole & Co.; H. L. Miller, E. F. Leland & Co.; Frank Cheate, B. F. Traxler; Jesse Summers; A. R. Tunks; A. Wagner; C. H. Dodd; B. L. Figeley and M. L. Vehon. Jos. A. Schmitz represented the Weighing Department of the Chicago Board of Trade.

The State Police Auxiliary Com'te was represented by F. L. Mather and B. W. Boering.

Among the Illinois shippers were H. Arends, Melvin; S. H. Baker, Pierston; L. H. Blankenbaker, Sidney; E. Block, Indianola; J. C. Dewey, Annawan; H. M. Dewey, Camp Grove; J. E. Eckhart, Washington; O. D. Edwards, Monica; R. S. Fernandes, Lincoln; O. H. Fullenwider, Mechanicsburg; W. E. Gabel, Elvaston; C. E. Graves, Weston; J. P. Guinrich, Gridley; Everette E. Hamman, Gibson City; John S. Harms, Pleasant Plains; B. P. Hill, Freeport; G. H. Hubbard and N. L. Hubbard, Mt. Pulaski; H. E. Hutton, Magnolia; Roy H. Jones, Monticello; V. E. Kepple, Bardolph; M. A. Leach, Cornland; C. R. Lewis, Springfield; O. J. Linebarger, Metcalf; Geo. L. Long, Bushnell; H. A. McCreery and J. A. McCreery, Mason City; A. E. McKenzie, Taylorville; F. C. Martin, Bloomington; O. J. Moss, Kemp; John M. Murray, Champaign; Howard M. Oakford, Walnut; G. S. Phillips, Walnut; M. J. Porterfield, Murdock; J. M. Potter, Galesburg; R. J. Railsback, Hopedale; U. J. Sinclair, Ashland; William Stacy, E. M. Wayne, Delavan; Elvis Weathers, Newman; W. A. Webb, LeRoy; B. S. Williams, Sheffield; Otto F. Young, Stonington; F. Ware, Butler.

THE COCKROACH is a radio "fan," and communicates with his brothers by wireless, if the statements of certain radio experimenters are correct. These men claim that, in working with very short wave lengths, when the instruments were only a few feet apart on a glass topped table, difficulty was encountered; and in attempting to determine a reason the experimenters found a cockroach between the two instruments. Removal of the insect again permitted normal communication. It is said to have been found that the cockroach has a wave length of between one-half inch and one inch.

In the Spring

In the Spring a fuller crimson comes upon the robin's breast.
In the Spring the wanton lapwing gets himself another crest.
In the Spring a livelier iris changes on the burnished dove.
In the Spring a grain man's fancy quickly turns to thoughts of better grain handling facilities.

Exports of Grain Weekly.

[From Atlantic and Gulf Ports, in Bus., 000 Omitted.]

		Wheat.		Corn.		Oats.	
		1921.	1920.	1921.	1920.	1921.	1920.
Jan.	7..	5,484	9,429	3,008	504	341	249
Jan.	14..	5,747	6,457	2,651	264	430	185
Jan.	21..	5,455	4,782	3,363	1,029	602	139
Jan.	28..	3,473	6,257	5,937	1,130	465	237
Feb.	4..	3,215	8,314	4,712	1,476	237	195
Feb.	11..	2,499	5,131	4,770	1,240	313	150
Feb.	18..	3,803	4,776	4,851	1,155	370	312
Feb.	25..	4,731	3,968	5,058	1,518	650	125
Mar.	4..	5,484	5,469	6,351	3,153	343	209
Mar.	11..	3,349	4,390	5,365	2,182	741	68
Mar.	18..	4,630	4,847	4,312	2,720	864	289
Mar.	25..	3,279	2,750	3,778	3,299	1,109	62
Apr.	1..	3,884	5,437	4,754	1,844	655	262
Apr.	8..	3,523	4,879	3,519	1,362	716	112
Apr.	15..	1,489	4,795	3,946	1,919	839	264
Apr.	22..	1,087	3,764	3,143	1,039	689	616
Apr.	29..	2,660	5,879	2,634	2,696	1,133	583
May	6..	1,921	8,190	1,733	2,038	638	913

Total since July 1..258,772 314,655 136,273 36,270 27,012 11,891

Getting Reliable Concrete Work.

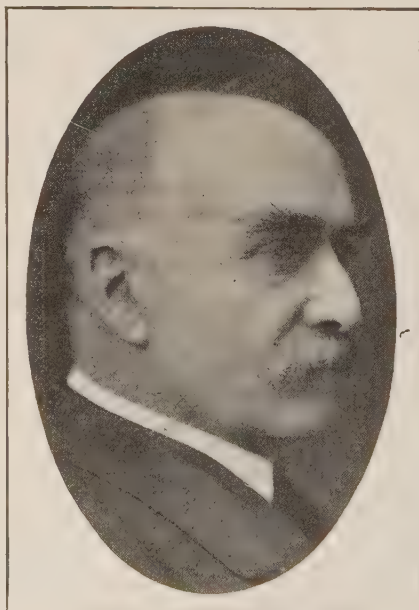
An owner contemplating the building of a concrete grain elevator has no difficulty in finding someone to undertake the job of actual construction. The owner easily can persuade the silo builder who has put up most of the concrete tanks for the storage of ensilage at nearly all the cow-barns of the county to depart from his special field and put up a cluster of larger tanks for grain storage. The silo builder can cash in on his knowledge of where local stocks of river gravel can be dug out, and then his tools and equipment do not have to be shipped by costly freight from a distance.

A paving contractor who has had experience in laying cement concrete as the base for asphalt surfacing can be persuaded to get higher up in the air. One Chicago paving contractor actually did erect the walls for a large grain elevator and malt house at Cedar Rapids, Iowa, some years ago, but gave up the job after wasting many thousand dollars in a useless construction.

All these incompetents can erect a grain elevator after a fashion, but they will use too much or too little material, place the reinforcing steel where it does not resist the stress, put so much water in the mix that the maximum strength is not obtained; and, worst of all, incorporate into the design a mistake in plan that forever compels the operator of the elevator to perform useless labor and to waste time.

These silo and sidewalk builders do not appreciate the necessity of making the pouring of the entire structure as nearly continuous as possible from foundation to top. The novice in concrete construction, if he undertakes to use moving forms will be likely to get the walls out of alignment, to move the forms so soon that the concrete slips out below or so late the concrete sticks to the wood and breaks.

The steel and the cement supplied by the material men are nearly always of good quality and there is little opportunity to go wrong in buying these; but far more important is the intelligence that plans the building and supervises the construction. The cost of expert knowledge and supervision is a small item proportionately and the owner can well afford to employ architects and engineers of experience and reputation. In fact, he can not afford to deal with bunglers who have no special experience in the class of building he contemplates. The dimensions and placing of reinforcing steel is a scientific formula giving the maximum strength at the least cost, but is a



M. Snow, Winnipeg, Man.

problem which is beyond the mathematical skill of the ignoramus, and is another good reason for employing an engineer with technical training in his profession.

An Address to Farmers.

Farmers generally have been the easy prey of fakers, swindlers and agitators for several years and no doubt many of them will continue to fall into the traps of the sharpers. Expecting such misfortunes to overtake the unwary the Kansas State Board of Agriculture has issued a timely warning which should be posted where every grain grower can read it. From this address we take the following:

AN ADDRESS TO KANSANS.

Farmers, like others, have fortunes good and bad.

When things go wrong in agriculture, however, there is universal concern, as witness the present deluge of prescriptions by would-be diagnosticians.

We must not place too much reliance on any remedies other than those developed by the farmers themselves. Legislation can be expected to do little more than enable the farmers to help themselves individually and thru organization and cooperation. Methods resulting from years of experience, under which the country's business is systematically conducted, cannot be replaced in a day or a year with something better.

Self-styled economists, professional friends of the farmer, and propagandists have seized upon the depression in agriculture as a means of access to press and platform, to expound widely different methods of rescuing the industry from the direful fate which they profess to see impending. Many have been visionary; some vicious. This has been most harmful and disconcerting to those who have been faithfully working the land, to say nothing of its baneful effect upon business. In short, it makes a bad situation worse.

As the problem of markets, transportation, finance and taxes are worked out, the individual farmer, as the individual in other industries, can rest assured that the degree of his success, hereafter, as heretofore, will depend upon the brains mixed with the business. In the avalanche of panaceas, cure-alls and remedies that has descended upon us to confuse, mystify and disturb, we must not lose sight of the most essential thing of all—individual responsibility in improving conditions thru matters largely under individual control.

It would be shortsighted not to give intelligent attention to the larger problems of the country's agriculture and then not to vigorously support those agencies striving for their solution, but we must not allow agitation of these questions to divert us from a proper realization of individual responsibility.

In agriculture better farm management is a medium thru which each individual farmer may improve his situation. If every farmer will give close study to the management of his own particular farm and community with a view to more efficiency in production we would see developed a diversified agriculture that would do more to restore the industry of agriculture and place it upon a permanently profitable basis than any other one thing. And this lies with the farmers themselves.

THE RADIO bill, which is to be introduced in congress as a result of the recent conference held in Washington, is being rapidly brought into shape. It is the present plan to give the president power in an emergency to decide any issue that may arise between the Dep't of Commerce, which is expected to have control of civil wireless, and the army and navy radio sections.

M. Snow on Canadian Grain Commission.

Matthew Snow has been appointed a member of the Board of Grain Commissioners for Canada to succeed W. D. Staples, whose term of office expired.

Mr. Snow is well known to the Canadian grain trade. He is a native of Scotland, and engaged in farming in Manitoba and Saskatchewan. He was one of the organizers of the Grain Growers Ass'n at Indian Head in 1900. He acted as assistant to C. C. Castle, warehouse commissioner until that office was merged with the Board of Grain Commissioners, and since 1911 represented the Commission at Winnipeg.

Two years ago he resigned to enter the employ of the Northwest Grain Dealers Ass'n as sec'y, which position he was filling acceptably until his present appointment.

Failure of Concrete Elevator in Idaho.

Additional proof of the fallacy that concrete construction eliminates the necessity for exact and specialized engineering knowledge on the part of the builder is given by the photographs reproduced herewith. They show the appearance of the concrete elevator of the Miles Milling & Elevator Co., at Montpelier, Ida., after the structure had given way under the pressure of grain contained within the bins.

The plant was being operated under lease by the Globe Grain & Milling Co., and the wheat which was in the house was owned by that company. Five of the seven bins are of about 5,000 bus. capacity, while the other two are about half that size. The building is rectangular.

The bin in the affected corner was filled almost to capacity, and apparently its walls withstood the pressure satisfactorily until the moment the bin was tapped for loading the contents into a railroad car. The failure which then occurred split one corner of the building, and cracks opened in other adjacent portions of the two connecting walls.

Some persons who saw the plant soon after the accident expressed surprise that it should have occurred just as the bin was being emptied. To the engineer, and even to one who has made but a superficial study of grain elevator construction, this is exactly what should have happened, because the lateral pressure of grain in a bin is much greater when the grain is flowing out than when it is stationary. Unequal pressures are then set up, and the ability of the builder is put to the test. The competent designer and builder must have knowledge of these unequal pressures, of their behavior under any and all conditions, and he cannot get this knowledge out of experience in the build-

ing of barns and silos. He must learn thru prolonged and intensive study of and experience in the building of real grain elevators, and if he has failed to do this his customers pay for his ignorance.

The proximate cause of this failure can only be learned by a careful study of the plant itself. An inferior concrete, or improper mixture, may have contributed; but the photograph tends to support the opinion that these causes may have been aided considerably by insufficient reinforcing. A single vertical bar is visible. Apparently it was placed in the corner of the structure, and in the lower portion of the view at the left it can be seen that the bond between the concrete and this vertical bar was rather imperfect.

Of the horizontal reinforcing, only one bar is shown in the photograph. As the visible reinforcing material was not broken, it is indicated that not enough steel was used, that it probably was not placed closely enough, and that some defect permitted a faulty bond between concrete and steel.

A rectangular concrete structure for the storage of grain is especially difficult to build, requiring specialized knowledge that may not be possessed even by men who have built cylindrical bins. Right angle corners are difficult to reinforce, because the meeting walls do not assist each other materially. If such a rectangular bin is to give satisfactory service these corners must be built so that all the inherent weakness will be overcome and the union of the walls made safe against rupture. In the Montpelier elevator the walls themselves were badly cracked and bulged.

Fortunately for the owners of the grain that was spilled when this failure occurred, practically all of it was salvaged and the loss from

this factor was negligible. The owners of the building, however, did not escape so easily. They must tear down and rebuild the damaged walls, and thus pay a second time for the work, suffering thereby for the failure to build the plant properly in the beginning.

"Greatest View in the County."

BY WAYFARER.

"Mighty glad to see you! Yes, sure, we get the Grain Dealers Journal—couldn't do without it. What do you think of our new elevator, reinforced concrete and from the top you get the greatest view in the county?"

Thus I was greeted when I introduced myself to the manager.

"Well, Mr. Blank, it appears to be a reasonably good house; I'd like to look it over while I'm here. Might get some pointers that will be helpful to other dealers who contemplate building."

"Sure thing. Come up to the elevator and I'll have Bill show you around while I go to the bank and get this bill of lading started on its journey."

A little later, as we walked into the driveway: "Bill, this is a Journal man. You show him thru the elevator. Take him to the basement and up to the cupola—and don't fail to let him see the great view of the county from the north window."

I went thru the house with Bill. He was occupied much of the time in telling me about the "great view" we would get when we arrived in the cupola, but in answer to my questions he admitted that the pit was so small he could only get on two sides of the boot and that it was the deuce of a job to clean out the chokes which came frequently because of something or other that was wrong with the leg. He didn't know what the trouble was.

Bill told of some other things, under questioning. It seemed the dump sink was much larger than was really necessary, and its bottom would not clear, so that he had to go down with a broom whenever a new kind or grade of grain was to be dumped. The automatic scale had not operated properly in the beginning, but a factory man had fixed this by tearing out the old installation and putting the scale in according to the plans which came with it. The distributor would not register with several of the bin openings, but Bill had become used to this, so he knew just where to set the indicator. One of the head bearings heated rather quickly; Bill had to watch it all the time. Thought maybe it was not lined up.

There may have been some other objectionable features. Bill was in a hurry to get to that north window to show me the view and probably I overlooked some things.

We finally got to the window in the cupola, and I had to admit it was a vast and beautiful landscape that I saw from that point of vantage. I couldn't refuse to admit it, because the fact was too plain.

Back in the office, the manager questioned me:

"What do you think of the house; and don't we get some view from that north cupola window?"

"Yes, Mr. Blank, it is worth a trip to the top to see that panorama of beauty and prosperity. But I'm wondering whether you built an elevator for handling grain efficiently and economically, or whether you erected a watch-tower."

He sputtered a while, but before I left he thanked me for my frankness. Said he had never given much thought to the chokes and the dump sink that would not clear and the other objectionable features.

He had been too much engrossed with that idea of the greatest view in the county.

ADVANCES totaling \$4,651,000 were approved by the War Finance Corporation during the week ending Apr. 29 for agricultural and livestock purposes.



Bursting of Miles Concrete Elevator at Montpelier, Idaho.

Reducing Fire Hazards by Enclosing Motors

By H. C. LEE, Engineer Mutual Fire Prevention Buro.

The enclosure of electrical machines, which are subject to dust, in dust tight, flash proof rooms, is recognized as essential, both from an efficiency and fire prevention standpoint. For some time past the insurance companies comprising the mill and elevator mutual group, have stressed this installation and the National Board of Fire Underwriters has now included it in its National Electric Code. The best and cheapest enclosure to build, is metal lath and cement plaster, on wood studding. The Mutual Fire Prevention Buro has drawn up the following specifications for enclosures for this purpose:

To build this enclosure—construct a framework of 2"x4" (as shown in Figure 1) about six feet high and large enough to enable the operator to get around the motor. The inside of this framework shall be covered with metal lath weighing about 2½ pounds per square yard. This metal lath comes about 20" wide and the studding should be spaced accordingly. If it is desired to make a finished job, the metal lath may be put around the outside of the studding, as shown in Figure 2. Plaster with cement plaster. The floor shall be covered with about 2 inches of concrete.

The mixture of plaster for outside work is one part Portland cement and 2½ parts of sharp, clean sand and hydrated lime equal to 10 per cent. by volume of the cement. A small

amount of hair may be added. For inside work the most satisfactory plaster is ordinary pulp plaster mixed 25 per cent. Portland cement.

Provide for a door, for ventilation, and for a pulley or belt opening.

The door shall be two ply wood covered with metal. It shall be hung so that it will close tightly and be self-closing. This may be done by weights but better by a sloping track as is used for fire doors.

Ventilation is essential. A pipe (not less than 6 inches in diameter and larger for large motors) shall enter the bottom of the room and connect with outside clean air. Another pipe shall leave from the top of the room going to outside. Motor rooms in basement may be ventilated by running the outlet pipe up the building for about 20 feet. The difference in height between inlet and outlet will give sufficient draft. Only in exceptional cases is a fan necessary. An examination of your motor when running will show air entering on the side and leaving the motor either by the other side or through the frame. If the inlet pipe is brought close to the draft side, the motor will help draw in cool air.

Finished room is shown by Figure 4.

Pulleys—It is better, if the type of motor will permit, to have the pulley and belt on the outside of the room. This may be done by leaving a hole in the wall large enough to permit the pulley to pass through. This hole can then be covered with two pieces of plaster board or wood fiber cut out to fit around the shaft or bearing. These may be slotted and fastened on with thumb nuts or slide in groove. They should slide horizontally, so that they can follow up as the motor is moved on its base to tighten the belt. See Figure 3.

Where motors are located near walls or in corners, two sides and ceiling are all that would be required, as the building wall may be covered with the lath and plaster.

The shape of the room is easily varied to suit conditions, such as sloping roofs and bin bottoms.

Small motors hung from ceilings may be protected by an asbestos building lumber enclosure. This lumber may be purchased in sheets and sawed and worked like any other lumber. One-fourth inch is found to be the most suitable thickness. The asbestos should be placed between the motor and ceiling. See Figure 5.

When Pulley and Belt are Inside the Enclosure: When it is necessary to have the pulley inside of the enclosure, dust may be prevented from entering through the belt holes by building a metal belt enclosure.

The metal belt enclosure should be made from 22 gauge sheet iron or heavier. The best method of construction is to make it in two sections, the division line being the line of centers of the pulleys. The edges which come together on this line of centers, should be flanged about one inch wide, and made to fit closely together. These flanges may be easily bolted together, and when made in this way the covering could be readily removed for repair of belt or pulley.

Metal belt enclosures are shown in Figures 6 and 7.

Attrition Mill Motor Enclosure.—Attrition mill motors require special attention in order to comply with the standard motor installation and protect the motors from excessive dust found around such installation. Various arrangements have been tried.

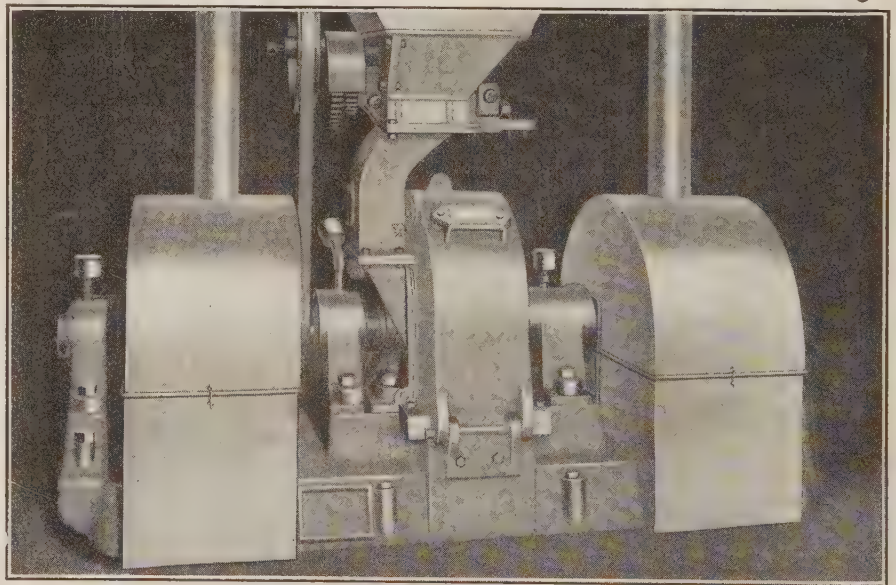
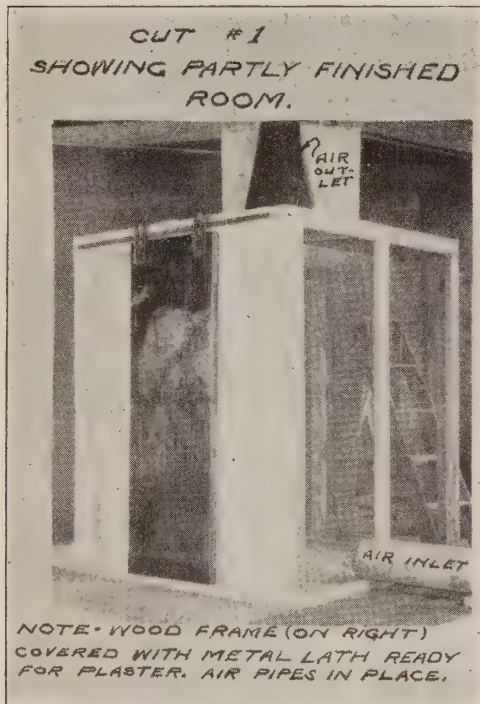
The one pictured in Figure 8 is being used successfully in a mill in Ohio. The top half is hinged on the back and the ventilating duct at the top can be detached for opening the case for inspection of the motor. Note that all bearings are outside and accessible.

Ventilation is obtained by an inlet duct that enters from the outside air on back side near bottom. The upper pipe vents to outside. The vents are 5 in.

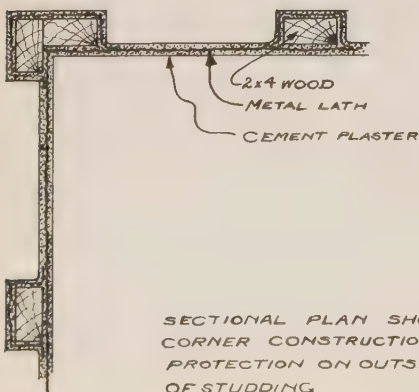
The enclosure is made of 18 gauge iron.

ATLANTIC, IA.—Gund, Sien & Co. have installed a radiophone to obtain daily market reports. Plans are being made for the installation of a radio having a larger receiving capacity so as to get market reports from Chicago.

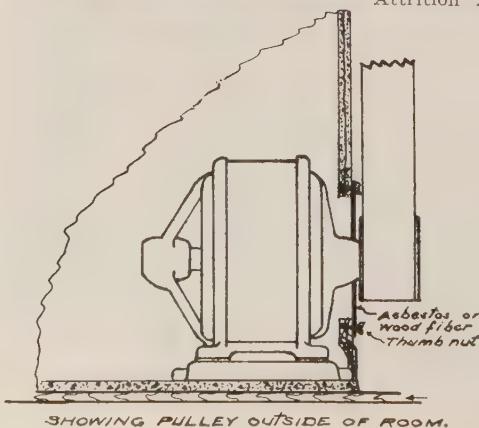
COON RAPIDS, IA.—A radio receiving outfit has been installed in the office of the Coon Rapids Elvtr. Co.



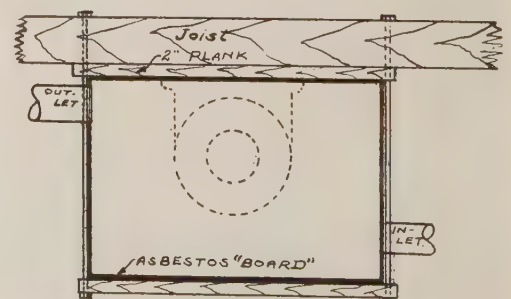
Attrition Mill Enclosure.



SECTIONAL PLAN SHOWING CORNER CONSTRUCTION AND PROTECTION ON OUTSIDE OF STUDDING



SHOWING PULLEY OUTSIDE OF ROOM.



CUT #5 ENCLOSURE FOR SMALL MOTOR HUNG FROM CEILING

Electric Motors for Grain Elevators

FROM AN ADDRESS BY H. E. JOHNSON BEFORE IOWA GRAIN DEALERS ASS'N

Electricity when properly harnessed is the safest driving power known, and when the equipment is properly installed the danger of losses by fire is much less than if you were using an oil engine or driving by steam power.

Direct Current Motors: Very few motors of this type can now be found as direct current is rapidly being displaced by alternating current. The direct current motor has a horizontal commutator with the brushes bearing on the commutator and in operation whenever the motor is running. While it is new and the parts are in good condition, very little sparking will be found under normal operating conditions unless the motor is greatly overloaded. When the motor has been in use a considerable time and the commutator becomes worn and affected by dust and dirt there is a possibility of continuous sparking at the brushes. Therefore, this motor is more or less of a fire hazard.

Alternating Current Motors: The first type of alternating current motor to be considered is the single phase, repulsion induction type, of which there are two distinct designs and types. One type is constructed in much the same way as the direct current motor, having a horizontal commutator and brushes which ride on it. Its use is accompanied with more or less danger of sparking.

The other type has a radial commutator instead of a horizontal one. The brushes are in use until the motor has attained approximately three-fourths full load speed, and they are then automatically released from contact. At the time the brushes are thrown off the commutator, the conductors connected to the latter are short circuited on the inside, and this gives a straight induction motor that is free from sparking *after* starting, unless it is overloaded to such an extent as to cause the speed to drop to the point where the brushes again become operative.

Single phase repulsion induction motors can start under load and take a very low starting current. A starting box should be used with those over 5 h.p.

Polyphase Squirrel Cage Motors: This type of motor is simple in design and it is

probably used more than any other. The rotor is made up of a number of short circuited copper conductors embedded in iron, the short circuiting being accomplished by brazing the ends of the conductors together. It has no commutator and no brushes. This motor is one of the safest for installation in a grain elevator or mill. It can start a small load, but it takes a very large starting current and a starting compensator is required when the motor size is over 5 h.p.

The Slip Ring Type Two and Three Phase Motor: This type of motor is not often found in small elevators, but it is used extensively in mills, more particularly on account of its ability to start a very heavy load. The terminals of the wound rotor are connected to slip rings mounted on the motor shaft. In the constant speed type, the brushes are in use until the motor attains its full load speed and the resistance placed in the rotor circuit has been entirely cut out by the controller. Therefore, this motor, until it attains full load speed, is a fire hazard to approximately the same degree as the single phase repulsion induction motor of the type using brushes only during the starting period.

A controller box must be used in connection with the slip ring type of two and three phase motor. This machine can start a heavy load and takes a low starting current when the controller or starting mechanism is properly operated by the attendant, upon whose ability and carefulness this feature is entirely dependent.

Automatic Start Induction Motors: This type of motor has a wound rotor, no brushes, and starts and runs as an induction motor. It has two separate and distinct windings on the rotor, one being used during the starting period and the other being put into circuit when the machine attains approximately three-fourths full load speed. The short circuiting segments are on the inside of the motor, and are entirely closed so there is practically no possibility of dust and dirt accumulating around them.

Tests have proven that automatic start induction motors are particularly safe in elevator and mill installations. It can start under a heavy load and takes an exceptionally low starting current, a compensator or controller being not necessary to effect the proper starting of the motor. All the starting equipment needed is a 3-pole throw switch, oil switch, or an enclosed, externally operated, fused knife switch.

What Motors Should Be Enclosed? In my opinion all motors of open type, installed in places where there is an accumulation of dirt and dust, or where these materials are in the atmosphere, should be enclosed.

If you will inspect all sizes and types of electric motors you will find slots and openings in and around the conductors and the frame. A motor is built as open as possible in order to allow proper ventilation and dissipation of the heat caused by loading of the motor. If these slots and openings are full of dust the heat will not be dissipated as rapidly as it should. This may cause excessive heating of the motor.

There is always more or less oil and grease around any machine. In time this oil and grease comes in contact with the dust and dirt, forming an oily mass around the hot conductors. The time may come when the heat from the coils or from the squirrel cage of the rotor will be sufficiently great, due generally to overload, to cause a fire. Undoubtedly spontaneous combustion assists in bringing the mass up to the point of ignition. This condition is a real fire hazard; and one of the largest fire insurance companies in this country has said that it has traced a number of

damaging fires to this innocent looking mass of oil and dirt.

The only motors that need not be enclosed in a fire proof enclosure are the entirely enclosed or explosion proof types.

Motors installed in grain elevators and mills must be protected better than those in most installations for the reason that, outside of the regular fire liabilities, they have dust and dirt to contend with. And grain dust in suspension is a real explosive under favorable conditions.

The Enclosure must accomplish four things. It must be dust proof to protect the motor; fireproof, so that in case of accident to the motor the damage is confined to the one room; it must be sufficiently large to permit the entrance of an attendant periodically to inspect the motor, change the oil, and to see if everything is running properly; and the room must be well ventilated to provide fresh, clean air to give the motor proper ventilation.

A motor in an enclosure will have a longer life than one not so protected, and it will add to the satisfaction the user gets from his electric power.

The construction of the enclosure may vary so long as it accomplishes the desired results. Probably the best construction, from an economical and practical standpoint, is one of steel lath and cement plaster on wood studding. It should be large enough to enable the operator to get around the motor. Its floor should be made of concrete or other non-combustible material, and the door should be self-closing and of noncombustible material. Proper ventilation should be given by running a pipe not less than 6 in. in diameter into the bottom of the room and reaching outside to clean air, while another pipe should lead from the top of the room, this pipe also going outside the building.

Switches: All switches of the air break type should be enclosed in sheet metal boxes and operated externally either by means of push button control or by a handle. Whenever such switches are opened, particularly if they are not opened with a quick pull, there will be a spark when the clips and blades separate. In a place not well ventilated this becomes a fire hazard.

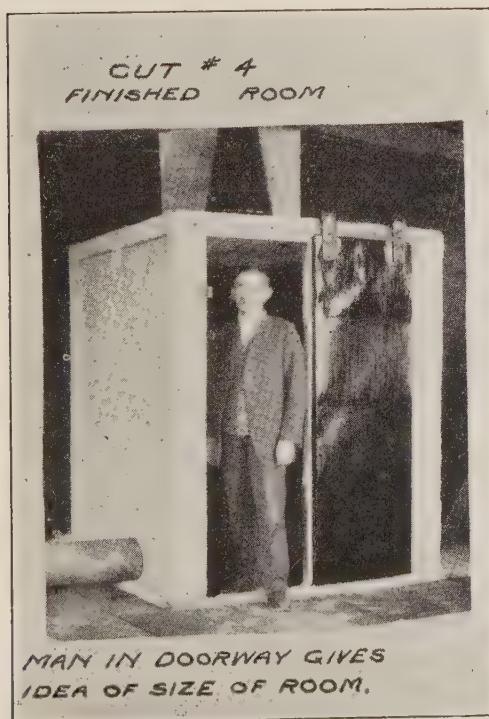
Compensators and oil switches are enclosed of themselves. Starting boxes for direct current and single phase motors are constructed with a fire mesh wire screen which amply protects them except for the contacts on their fronts, and there is little possibility of sparking when a single phase motor is started properly and when the starting box for such a type is located in a ventilated place we do not believe it would be necessary to enclose the starter entirely. In places not well ventilated it should be done.

Fuses: Fuses should always be enclosed in a steel cabinet. There should be no variation from this. Never use open link fuses: they are dangerous to life and property.

Your motor, the dependability of the entire installation, depends upon the protection given it. A fuse is supposed to give this protection, but the great majority of installations are not properly fused, the fuses usually being so large that the same protection would be afforded if the fuses were absent and the wire run right on thru.

Direct current motors with starting boxes, single phase repulsion induction motors with starters, and automatic start induction and slip ring two and three phase motors take such a low starting current when properly operated that fuses can be placed in the circuit to protect them properly. The squirrel cage motor must have a starting and a running set of fuses or an inverse time limit overload relay. An overload relay, it must be remembered, is a mechanical device and the owner of the plant can only be sure that it is operating properly when it is kept free from dust and given the care it requires. A correctly rated standard fuse is the best protection.

You will find, in the majority of cases, that



[See facing page.]
Enclosure for Electric Motor.

The Angle of Hoppered Bin Bottoms

your power circuits are over fused. Get in touch with the manufacturers of your electrical equipment and learn how they can best be fused and protected.

Conductors: All conductors should be of a liberal size to allow them to carry the full load amperes without heating and to give your motor an opportunity to do its work efficiently.

If the conductors are not of the correct size there will be a large voltage drop. This not only tends to heat the conductor, but it automatically reduces the voltage and puts an added burden on the motor. To illustrate: If a 3 h.p. motor is installed on a circuit supposed to be 220 volts, and if, due to faulty conductor installation you get only 160 volts at the terminals of the motor, that motor can give out but about 1.6 h.p.

To have a truly safe installation, all conductors should be enclosed in conduit with the proper conduit fittings. Of course it is supposed that the system will be properly grounded.

If the motor is enclosed in a dust proof fire-proof enclosure; all conductors in iron conduit, well grounded; and all switches, fuses and control apparatus in fire proof boxes it is difficult to imagine how a fire could be started by the electrical equipment. I have seen many installations where no attempt has been made to make them fireproof and safe, and because the owner has had no fire in the years the equipment has been in service he feels safe. All that we can say is that these particular persons have been fortunate.

It costs very little more to have the installation made right when it is first put in, and there is no reason to take a chance.

THE PORT of Antwerp, Belgium, receives a large quantity of grain for transshipment to other parts of continental Europe. According to Consul George S. Messersmith, the city has 16 modern pneumatic floating elevators and a large number of others specially constructed for transferring grain from vessel to railway or dock or to barges moored alongside. During 1921, he reports that there were 171 elevators and that these were used a total of 2,433 times, discharging 1,662,989 tons of grain from 1,274 vessels.

BITUMINOUS COAL mine operators in non-union territory so far have been able to fill all orders for coal; but the demand has not been equal to their capacity. Their output is increasing daily and no shortage is expected until the middle of June.

Hopper bottoms for bins for the storage of granular materials have the approval of all designers, builders and operators of storage and handling plants, and it would be almost impossible to find one such man who would argue against their practicability and usefulness. Indeed, it is altogether correct to say that the modern, rapid handling grain elevator owes much of its efficiency to the self-cleaning bottoms of bins. With flat bottoms their percentage of efficiency would be materially reduced.

The first requisite of a properly designed hopper bottom is that it be built so that it will clean itself when the bin is used for any of the materials likely to be handled thru the plant; the second, that the hopper walls be not built so steep that the storage capacity of the bin will be unnecessarily reduced.

The slope of the hopper walls, or the angle which they shall form with the level, is dependent largely upon the angle of repose, or natural slope of the material to be placed in the bin. The angle of repose is that angle at which a body resting on an inclined plane is just on the point of sliding down. This, and the natural slope, depends upon the adhesion between the separate particles of the material, their friction against each other and against the bin bottom itself, and it often varies in one and the same material from time to time, with changes in weather conditions, etc. Especially does it vary with the relative dampness of the material. In the case of grain resting upon a hopper, the angle of repose is that angle at which the friction and adhesion between the grains, and their friction upon the hopper, just balances the pull of gravity. When gravity overcomes this friction and adhesion the grain slides.

In his treatise on "Grain Pressures in Deep Bins," J. A. Jamieson, an engineer who made a special study of this subject, records the results of a series of experiments to determine the co-efficient of internal and external friction. He devised apparatus consisting of a tray which could be filled with grain, carefully leveled off and the frame containing it balanced. By raising one end of the tray until the first movement of the grain took place he was able to determine the angle of repose for that par-

ticular grain, and a variation of the test gave him the co-efficients for grain on grain, and for grain on the materials of which bin walls are usually constructed.

Jamieson found that different varieties of grain have angles of repose varying from 24 to 36 degrees, and that different samples of wheat will vary from 26 to 34 degrees. The amount of moisture contained in the grain, and even a damp or dry day having considerable influence, he declined to adopt a No. 1 hard wheat, weighing 50 lbs. per cubic foot and having an angle of repose of 28 degrees as a standard which will be safe to use in all varieties of grain.

Every elevator operator knows that some of his bins will clear perfectly so far as the flat sides of the hopper are concerned, but that the corners or valleys of the hopper will not clear. A little thought will make it plain that this is because the angle of the valley is materially less than the angle of the flat sides, so that if the angle of the sides is only barely great enough to cause the grain to flow some of it must of necessity remain in the valleys after the remainder has run out. This is particularly objectionable when bins may be used successively for grains of different kinds or grades, requiring the operator to sweep them out each time before a new grain can be spouted into the bin.

The table which is reproduced herewith from *The Miller, London*, shows the angle of hopper valleys when the angle of the flat sides is known.

Reading the angle of one flat side along the top line of the table, and the angle of the other flat side in the column at the left, the angle of the valley will be found at the meeting of the two columns. Thus, if the angle of one flat side is 45 and the angle of the other 40 degrees, the angle of the valley is 33 degrees.

This table can be used also for roof slopes, and for the installation of diamond spouts, where the material runs down one corner.

If the valley of a bin already in service fails to clear properly the defect can be corrected by building up the valley until the pitch is great enough to cause the material to flow. In concrete hoppers this can be done by partially filling the valley with concrete, making the new construction rather thick at the top of the hopper and gradually thinning it out as the point of discharge is reached. For steel hoppers, an additional steel plate can be laid.

THE Southwestern Millers League voted at its recent meeting in Kansas City to spend \$20,000 to \$25,000 in an advertising campaign to induce farmers in the hard winter wheat section of the United States to attempt to grow a better quality of wheat. All the old officers of the League were re-elected.

KANRED wheat is to be grown experimentally in Russia, East Africa, Italy, India, England, Australia, Scotland, Canada, Egypt, Denmark and China. While it is expected that in many tests it will be found of no value for the particular locality, it may prove of some worth in crossing with other varieties of wheat.

A PLAN for the adjustment by arbitration of commercial disputes in domestic as well as foreign transactions was approved by the board of directors of the Chamber of Commerce of the United States at the April meeting. The plan includes a method of arbitration that may be adopted by member organizations of the Chamber, rules to be followed in such arbitration, and sets up arbitration procedure for the Chamber itself.

0	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°
30°	22 $\frac{1}{4}$	24	25 $\frac{1}{2}$	26 $\frac{3}{4}$	27 $\frac{3}{4}$	28 $\frac{1}{2}$	28 $\frac{3}{4}$	29 $\frac{1}{4}$	29 $\frac{1}{2}$	29 $\frac{3}{4}$	29 $\frac{3}{4}$	30
35°	24	26 $\frac{1}{4}$	28 $\frac{1}{4}$	30	31 $\frac{1}{4}$	32 $\frac{1}{4}$	33	33 $\frac{3}{4}$	34 $\frac{1}{4}$	34 $\frac{1}{2}$	34 $\frac{3}{4}$	35
40°	25 $\frac{1}{2}$	28 $\frac{1}{4}$	31	33	34 $\frac{1}{4}$	36	37 $\frac{1}{4}$	38	38 $\frac{3}{4}$	39 $\frac{1}{4}$	39 $\frac{3}{4}$	40
45°	26 $\frac{3}{4}$	30	33	35 $\frac{1}{2}$	37 $\frac{1}{2}$	39 $\frac{1}{2}$	41	42 $\frac{1}{4}$	43 $\frac{1}{4}$	44	44 $\frac{3}{4}$	45
50°	27 $\frac{3}{4}$	31 $\frac{1}{4}$	34 $\frac{3}{4}$	37 $\frac{1}{2}$	40 $\frac{1}{4}$	42 $\frac{1}{2}$	44 $\frac{1}{2}$	46 $\frac{1}{4}$	47 $\frac{1}{2}$	48 $\frac{1}{2}$	49 $\frac{1}{2}$	49 $\frac{3}{4}$
55°	28 $\frac{1}{2}$	32 $\frac{1}{4}$	36	39 $\frac{1}{2}$	42 $\frac{1}{2}$	45 $\frac{1}{4}$	47 $\frac{3}{4}$	50	51 $\frac{3}{4}$	53	54 $\frac{1}{4}$	54 $\frac{3}{4}$
60°	28 $\frac{3}{4}$	33	37 $\frac{1}{4}$	41	44 $\frac{1}{4}$	47 $\frac{3}{4}$	50 $\frac{1}{2}$	53 $\frac{1}{4}$	55 $\frac{1}{2}$	57 $\frac{1}{2}$	59	59 $\frac{1}{2}$
65°	29 $\frac{1}{4}$	33 $\frac{3}{4}$	38	42 $\frac{1}{4}$	46 $\frac{1}{4}$	50	53 $\frac{1}{4}$	56 $\frac{1}{2}$	59 $\frac{3}{4}$	61 $\frac{1}{4}$	63 $\frac{1}{2}$	64 $\frac{1}{4}$
70°	29 $\frac{1}{2}$	34 $\frac{1}{4}$	38 $\frac{3}{4}$	43 $\frac{1}{4}$	47 $\frac{1}{2}$	51 $\frac{3}{4}$	55 $\frac{1}{2}$	59 $\frac{3}{4}$	62 $\frac{3}{4}$	65 $\frac{3}{4}$	68	69
75°	29 $\frac{3}{4}$	34 $\frac{1}{2}$	39 $\frac{1}{4}$	44	48 $\frac{1}{2}$	53	57 $\frac{1}{2}$	61 $\frac{3}{4}$	65 $\frac{3}{4}$	69 $\frac{1}{2}$	72 $\frac{1}{2}$	74
80°	29 $\frac{3}{4}$	34 $\frac{3}{4}$	39 $\frac{3}{4}$	44 $\frac{3}{4}$	49 $\frac{1}{2}$	54 $\frac{1}{4}$	59	63 $\frac{1}{2}$	68	72 $\frac{1}{2}$	76	78 $\frac{1}{2}$
85°	30	35	40	45	49 $\frac{3}{4}$	54 $\frac{3}{4}$	59 $\frac{1}{2}$	64 $\frac{1}{4}$	69	74	78 $\frac{1}{2}$	82 $\frac{1}{4}$

Table Shows Angle of Hopper Valleys in Degrees.

Grain Elevator Construction

[From an Address by A. C. Rynders, President of the National Grain Elevator Builders' Ass'n.]

The first thing relative to building an elevator is selecting the proper location.

When I was young in the elevator business, the railroad not only furnished a site and a side track, but it was perfectly willing to pay the taxes on the elevator for the benefit of having a receiving depot for bulk freight. At the present time, the railroads want you to build on your own land, pay \$1690 for a switch, pay your own taxes and work for the railroad company for nothing.

There are many things to take into consideration in picking a location for an elevator. In the first place determine the amount of grain tributary to the station where you wish to build; a high dry point is preferable to any other. Our choice would be a site where the main travel could reach the elevator with the smallest inconvenience.

Another consideration is a dry place to dig the pit and a solid place to put the foundation. Any of these latter may be overcome by proper handling of the foundation and waterproofing the pit.

Size: The next thing to take into consideration would be the size of an elevator to build. To arrive at the size and the kind of material to use, it is necessary to go into figures quite extensively but our recommendation has always been that an elevator that will hold three days' receipts at a busy time, is ample for any country receiving station for if you can not get cars, it stands to reason that they are all on their way to market with grain.

At this time, you are very much afraid if you sell your grain for 10 days' shipment that you can not get cars. Therefore, you hold your elevator full of grain and in nine cases out of ten the grain goes down because every ounce of energy in the country is expended towards getting this grain to market.

The house should have enough bins to hold a full carload of each kind or grade of grain received during any one season of the year together with one empty bin for the second carload, and another bin should be provided to turn wet or heated grain in case of necessity.

The elevator should be high enough to load cars without shovelling. The equipment should be heavy enough to handle grain as fast as it can be dumped and the bins should all be self-cleaning. In fact, an elevator should be built to require the least amount of manual labor possible as every particle of labor costs must be subtracted from the amount received before there is any profit left.

The kind of elevator to build is often not left up to the owner or the contractor, but is dependent upon the city ordinance; and the kind of elevator, whether concrete, brick, steel, tile, cribbed or studded is often left to prejudice instead of facts and figures.

No doubt a first class elevator can be built from any of these materials if properly designed, carefully supervised and conscientiously constructed.

We have asked some of the western contractors to give us an approximate idea of the price of different kinds of elevators constructed in this territory. From their estimates these figures are taken. A 20,000 bushel concrete elevator with a proper number of bins to handle the ordinary country station, would cost in the neighborhood of \$25,000, a brick from \$22,000 to \$23,000, steel approximately \$18,000 to \$20,000 and tile is practically the same price. A cribbed elevator would cost \$13,500 and a studded elevator \$11,800, all with the same number of bins and the same handling equipment and we figure the same amount of labor and expense would operate every one.

Taken on this basis, the interest on a 25,000

bushel elevator at 7% would be \$1750. Figuring the tax rate at \$1.75 per hundred, would cost \$437.50. The insurance rate on the fire-proof elevator with corn shelter and other like machines at 14c would be \$35.00. Figuring the depreciation at 3% would be \$750.

While there are a great many that will not agree with any of these figures, still, we figure in 30 years or 35 at the most, country elevators will be entirely out of date; therefore, the up-keep should be figured on this basis.

At 5c per bushel, you would have to handle approximately 113,450 bushels a year to pay your overhead expenses without figuring any of the smaller items such as stationery and office expenses, loss, etc.

A concrete or tile elevator while entirely fire resistive is subject to dust explosions to some extent and we believe that all of these types of elevator should have a ventilated cupola and pit.

We have not taken into consideration wind insurance on any of these elevators. This would have to be figured in any case, whether the elevator was concrete or wood, brick or steel. Another safeguard—all elevators should be equipped with lightning rods or lightning protection of some approved design.

Elevator equipment is as varied as the number of the contractors installing it. It makes no difference what kind of an elevator is to be built, if the foundation gives away, it is one of the things that can not be cobbled up. If you have the best elevator in the world and the best foundation in the world and the motor power will not run, your elevator will do you no good. Two of the main things, therefore, to look out for, is the foundation and power.

A non-chokable elevator leg is now deemed a necessity. First class construction engineers insist on this type of machine.

A great difference of opinion exists as to the best methods of weighing and handling grain, but we believe every year will see heavier loads and heavier scales and heavier dumps will become an absolute necessity. In fact, we believe that all driveways should be built twice as strong as is required to carry the present loads.

Elevator Failures: More grain elevators fail from a construction standpoint than any other specialized buildings. As a general thing churches, schoolhouses, office buildings and factories are designed by competent architects or engineers, but nearly every carpenter thinks that he is perfectly competent to design and construct a grain elevator. No other type of building to our mind, has more stresses and strains, built in as many different ways as the grain elevator. The elevator has the vertical weight to carry, the side pressure to overcome and the force of the wind on a tall building when it is empty to take into consideration. The machinery must be placed and given room to operate. We know of no other type of building that is as complicated to design satisfactorily. In fact, there has been developed in the last few years highly specialized contractors and engineers in this line of work.

Generally speaking, in a factory the placing of the machinery is practically all that there need be taken into consideration as the floors will easily carry the load. In schoolhouses and theaters, the main thing is to carry a live load of 50 lbs. to 75 lbs. to the foot. In a grain

elevator the pressures are much higher, and the loading and unloading stresses vary to a great extent.

Another thing to take into consideration when planning or designing an elevator is the vermin, the weevil, rats, mice and all of the pests that go with grain handling.

What might be entirely satisfactory for one man at one locality, would not in any way be satisfactory for another man in another locality. For instance, if you are building an elevator for storage purposes only, large concrete bins would be the most economical thing to build. On the other hand, a small plant handling many numbers of different grains in small units, concrete would be prohibitive to build.

Experience in Building Required: Most grain dealers do not build elevators wholesale, but build them one or maybe two once in a great while. Sometimes they may build a string of houses. However, elevator building is like any other business—to make a success of it, it takes a man of experience and backing to carry on the business.

No man in the grain business consistently sells to the man who is the highest bidder. In fact, I doubt if any dealers believe that the man who makes the highest bids gives the best returns on your money invested in grain.

It would be the same in the elevator construction business. The lowest bidder does not always give you more for your money or give you a greater net return than maybe the highest bidder on the job.

We believe the only way to build an elevator is to go to a reliable party or a man that you have every confidence in and let him build your house for you. He can sit down at your table and show you wherein you can save money, where you can spend money to good advantage, how you can handle your particular kinds of grain at the least expense and thereby give you an elevator that will be a profit maker, a house you will be proud of.

It Is True Now, as Then.

In the course of an address delivered at the dedication of the monument to General Ulysses S. Grant, in Washington, Apr. 27, Vice President Coolidge said of the great soldier of the Civil War:

The economic condition of the country was depressed by a great financial panic. He refused to seek refuge in any fictions. He knew that sound values and a sound economic condition could not be created by law alone, but only through the long and toilsome application of human effort put forth under wise law. He knew that his country could not legislate out its destiny, but must work out its destiny. He laid the foundation of national welfare, on which the nation has stood unshaken in every time of storm and stress. His policy was simple and direct, and eternally true.

General Grant is loved largely because of the fact that he lived the great realities of life. The truths which influenced him while he was in command of an army in the field and while he was President are just as vital today as they were then. Our country now needs men in authority who will refuse to "seek refuge in any fictions"; who will realize that "sound economic conditions can not be created by law alone."

THE FIRST FIRE thought to have resulted from radio apparatus in Indiana occurred in Evansville Apr. 18. The owner of a dwelling had lowered his aerial to the roof during a wind storm to prevent its being carried away. Firemen believe that the battery was connected, and that the touching of the wires caused sparks that ignited the shingles.

OVERHEAD EXPENSES.

Kind.	Price.	Int. 7%.	Taxes @ \$1.75.	Insurance Rate.	Amt.	Depreciation.		Opera- tion.	Man- ager.	Total.	Bu. @ 1c @ 5c	
						Rate.	Amt.				per Bu.	per Bu.
Concrete	\$25,000	\$1750	\$437.50	14c	\$35.00	3	\$750	\$1200	\$1500	\$5672.50	567,250	113,450
Brick	\$25,000	\$1750	\$437.50	14c	\$35.00	3 1/2	\$875	\$1200	\$1500	\$5797.50	579,750	115,950
Tile	\$20,000	\$1400	\$350.00	14c	\$28.00	4	\$800	\$1200	\$1500	\$5278.00	527,800	105,560
Steel	\$17,500	\$1225	\$306.25	14c	\$24.50	4	\$700	\$1200	\$1500	\$4955.75	495,575	99,115
Cribbed	\$13,500	\$945	\$236.25	75c	\$101.25	5	\$675	\$1200	\$1500	\$4656.50	465,650	93,130
Studded	\$11,800	\$826	\$206.50	75c	\$88.50	5	\$590	\$1200	\$1500	\$4411.00	441,100	88,220

Improved Tools for Opening Grain Doors.

The Railroad General Managers Ass'n of Chicago has just issued a large poster describing and illustrating a method of opening grain doors with specially designed tools that make it easy for the operator and least destructive to the lumber of which the door is composed.

The engraving herewith shows the style of bar provided, which is far superior to the crowbar picked up anywhere or the bar used to draw spikes from railroad ties. There is no patent on the design. Bar A with knob grip is for closing and opening outside car doors. It has a screw-driver point and is $\frac{3}{4}$ inch in diameter and 24 inches long. Bar B has a heel and a screw-driver point. It is $\frac{3}{4}$ inch in diameter and 23 $\frac{1}{2}$ inches long. Bar C, for opening outside car doors at grain unloading hoppers, has a diamond point, and a screen guard in the center to prevent it from passing thru the bars of the grating over the receiving sinks. It is $\frac{7}{8}$ inch in diameter and 35 inches long.

Bar D is for releasing bulk grain from cars. Like the others, it is made of octagon tool steel, but 1 $\frac{1}{4}$ inches in diameter. Its other specifications are Length—4 ft. 4 inches. The length of the bar may be modified, if need be, to fit physical conditions, due to lack of sufficient space at any unloading hopper. Or a longer bar may be used if desired. Weight—17 $\frac{1}{2}$ lbs. Screen guard—Guard (preferably at end) of sufficient size to prevent bar from passing between grate rods (screen) over grain unloading hoppers. Foot—Arc (or throw) 3 inches. Fulcrum—Variable from point of

blade to extreme heel which is 6 inches. Blade—Width 1 $\frac{3}{4}$ to 2 inches.

Following are the approved regulations for the release of grain with this tool:

Remove the top door first, then the next door from the top, and so on down.

Before attempting to pry upward one end of any twenty-inch grain door, be sure to loosen, thoroughly, both ends of the door from the door posts. First loosen the door at one door post (see Fig. 1), then loosen it at the other door post. This loosening of a sectional door from both door posts, before attempting to pry the door upward, is of the utmost importance to facilitate the removal of each door. And here, the bar with the suitably determined, variable, fulcrum, will prove its worth.

Where the grain door barricade is built four or five sections high, or the "topping off" has been done with loose lumber, there is little or no pressure of grain against such top door, or top boards. A car may be loaded with grain well toward the roof, yet the amount of pressure against the top door, due to the grain, is comparatively small. Hence the top door, or boards, can be removed with very little effort by first prying the ends loose from the door posts, and then shoving the door onto the grain by an upward and inward thrust of the bar.

After both ends of the next door to be removed, have been well loosened from both door posts as shown in Fig. 1 hereof, insert the bar, between the grain doors, at the door post, in the position illustrated in Fig. 2; then pry the door upward as far as the bar will permit—first at one end of the door, then at the other end of the door. Here, again, the bar with the suitably determined, variable, fulcrum will be found effective. It is obvious, that the amount of time and effort necessary to raise a grain door, that has been installed and fastened with reasonable correctness, can be measured, solely, by the arc of the bar and the available leverage, which leverage, in turn, is necessarily measured and determined by man power.

The pressure of the grain, usually, is greater on this door, but by using a bar, with a suitably determined, variable, fulcrum, with which to loosen the door at each end, as explained above, and then by prying the door upward, first at

one end (as shown in Fig. 2), and then at the other end, this door can be raised quickly, if it has not been spiked, or if it has not been tied to the door below it by an inside reinforcement nailed to both doors.

Because of the door sill, which provides a footing for the heel of the bar, the removal of a bottom door, after the doors above it have been taken out, requires but little time and effort, provided a bar with adequate, variable, leverage, and arc, is used. However, both ends of the bottom door should be loosened well from the door posts before attempting to pry the door upward.

An adequate unloading platform, at the unloading hopper, is an indispensable part of any complete equipment for releasing grain from cars by man power. Regardless of this fact, generally speaking, such platforms, on which the grain shovellers must stand to release grain from cars, have not been given the consideration, by grain elevator designers, and builders, their relative importance demands, with the result that many such platforms are not only too short (from edge to edge along car) but lack sufficient depth from front to back. Actual measurements, in one extensive grain handling district, showed depths of platforms (front to back ranging from 8 to 38 inches. Where there is a lack of suitable depth, unloaders are often handicapped in securing proper footing while wielding the bars.

These platforms should be as long, from edge to edge along car, as the distance between the unloading rope sheaves will permit, and they should be at least 24 inches deep and 30 inches or more would be better. And, too, the character of the surface construction of these platforms is a factor worthy of mention, according to many elevator men. Such surface, which provides a footing for the unloaders, often consists of iron rods, with three or



Fig. 1. Loosening Grain Door from Door Post.

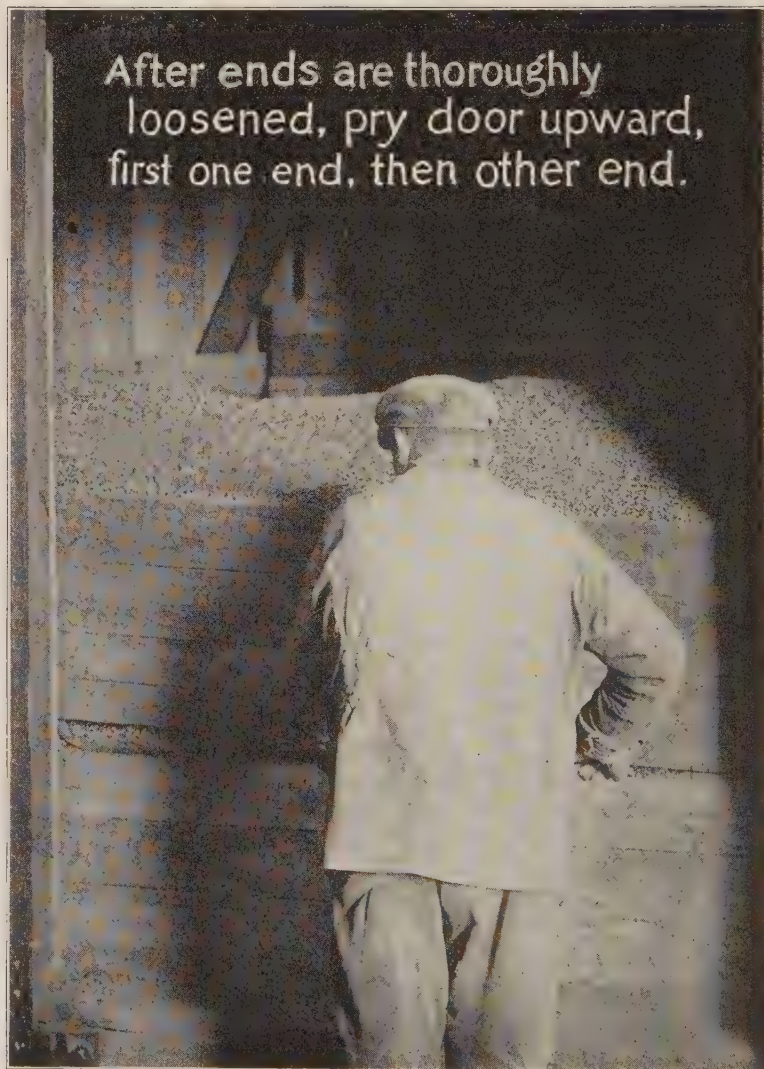


Fig. 2. Prying up Grain Door at One End.

four inches of space between the rods. Grain flowing over these rods soon polishes their surfaces until the rods become slippery. This condition is augmented where the rods are few in number, and placed relatively far apart. Planks, or other flat rough surface, with cracks between to permit grain to pass through, make a much better footing for the unloaders.

RED OAK, IA.—Turner Bros. recently installed a radio in their office by which to receive market reports.

SUMMARIES of its financial and commodity market news are being broadcasted each evening at 6:30, daylight saving time, by the Chicago Journal of Commerce thru Station KYW.

THE MOVEMENT of Yellow cabs in Chicago is to be controlled by radio. Nine broadcasting stations will be erected, and each superintendent's car will have a receiving set. These men are constantly driving thru their respective districts, and it is expected that the radio will enable them better to direct the operation of the cabs under their authority.

Relative Costs of Concrete and Wood Elevators.

BY T. J. BRYAN.

Cement concrete as a material for the construction of grain elevators long has been admitted to possess inherent advantages that warrant its instant choice over wood, were it not for the greater first cost of the concrete house. This bugbear of first cost is not so formidable as it seems, and after a few years the saving in operation and up-keep of the cement plant will overcome the interest on the greater investment. In the long run the cement plant will prove cheaper.

Taking a grain elevator of 30,000 bus. capacity, for example, a fair estimate of its cost in wood construction is \$12,000, while a concrete house would cost about \$15,000. The interest charge on the difference in cost of construction is \$180 a year, which is little more than the annual repairs on a wood house. There is then the saving in insurance and annual depreciation to apply on the principal first cost, so that at the end of five years the investment in the wooden house would stand at \$16,900, against only \$15,900 for the cement concrete grain elevator.

After five years the saving in operating cost of the concrete house compared with the rapidly depreciating wood structure would mount up to a large sum of money. It has been figured at \$9,000 at the end of 15 years.

The trend of the times is toward higher cost of lumber as the natural resources of our timber lands become exhausted, while the raw material for cement is inexhaustible. This must make for still more favorable costs of concrete construction. One of the biggest items in running a cement mill and transporting the material is the cost of fuel, which is due for a big drop in price when the present miners' strike is settled.

The Metric System of Weights and Measures

[From an address by Jos. A. Schmitz before Western Grain Dealers Ass'n.]

A world wide, uniform system of weights and measures, like a world wide universal language, is considered desirable by many peoples and nations, more particularly nations extensively engaged in international trade.

From a practical viewpoint, it must be plain that to be worth while, any international system of weights and measures must be adapted to the every day uses of the people. A system that would meet only the needs of scientists, scholars and the like, would never suffice.

There are two major systems of weights and measures used throughout the world, both of which are legal in the United States. One of them is generally referred to as the British-American System; the other as the Metric System.

Any system of weights and measures that has a fair chance of becoming internationally adopted should receive our earnest consideration. In considering the system best adapted for the whole world, our government will necessarily take into account the confusion which will unquestionably arise from a change in the standards now used to any other standard no matter how simple or how adaptable the new system may be.

Advantages of Metric System.

It is pertinent to review some of the advantages claimed by the proponents of the metric system:

a—The metric system establishes a definite relation between the units of length, volume, capacity, area and weight.

b—The metric system makes for simplicity. It is based on the decimal system. The meter is divided into 100 centimeters, just as the dollar is divided into 100 cents. There is a tremendous advantage in the work of calculation, and in setting down the result in arithmetical conclusion. Since every branch of human endeavor is based on measurement of length, area, volume or weight, the sum total of time and effort saved in simplifying a weight and measure system is almost incalculable.

c—The metric system has made the greatest headway towards uniform adoption. It is the one most frequently advocated for adoption for the position of international use. It is the sole standard of weights and measures used in several of the largest exporting countries, and in many of the smaller importing countries.

d—The metric system has the endorsement, and its adoption is advocated by educators throughout the United States. The men and women in charge of our schools and colleges claim that the simplicity with which the metric system can be taught by instructors, and grasped by the pupils, saves much time that can be employed otherwise.

e—It is claimed that some of the large manufacturers in the United States who have adopted the metric system are well pleased with its use and advocate its adoption by legislation.

f—International trade calls for an international system of weights and measures. Since many of the importing countries have now adopted the metric system, American goods for export must, in many cases, be made in accordance with metric measurements, and, because of this, many industries are compelled to make their goods in accordance with two separate systems of weights and measures. Economical production is essential in the world of competition, and economical production must of necessity be quantity production. Quantity production thrives best where there is uniformity in details of manufacture. Two systems of weights and measures obviously make for greater cost of manufacture.

g—The argument that the world's markets must conform to our standard of weights and measures is not well taken, for the manufacturer who seeks to make things for the world's market must conform to the weight and measure system in force in the country with which he expects to do business.

h—The "International Metric Standards" have been the fundamental standards of the United States since April 5, 1893, and from that date our government has never recognized the "British Standards." British Standards are only National, not International, and of course, they also differ somewhat from our own standards.

Disadvantages of Metric System.

The opponents of the metric system, on the other hand, advance arguments diametrically opposed to those I have just reviewed, as follows:

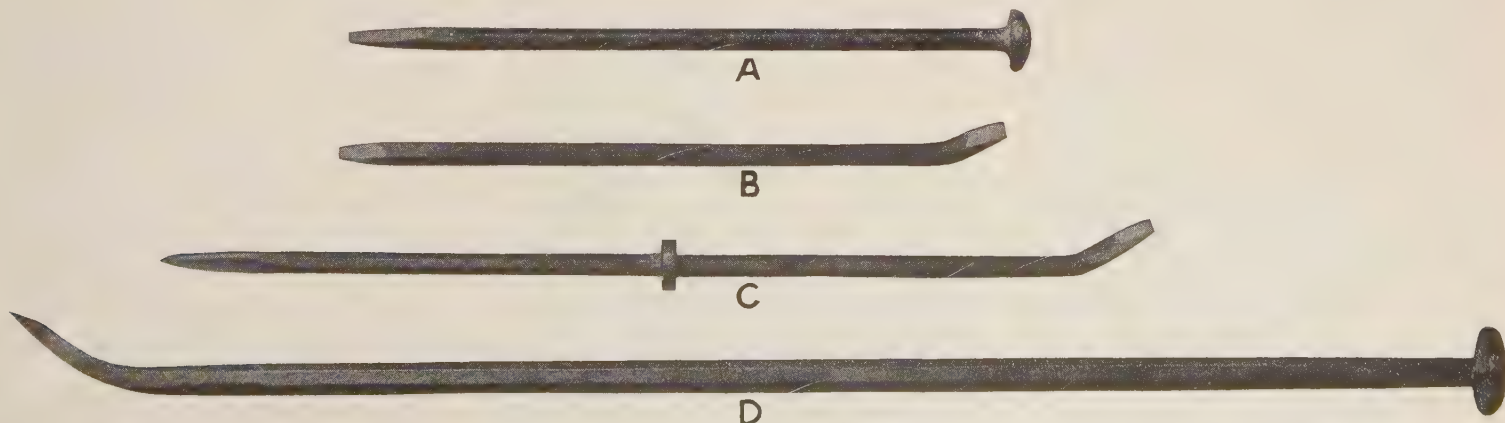
1—The metric system was legalized by congress in 1866, and in spite of the fact that the advocates of this system have been singing its praises for many years, they have been unable to convince the people of the United States that a change was necessary, or even desirable. As far back as 1799 the French government invited representatives of many nations to attend what is known as the First International Conference of Weights and Measures. The metric system was put forward at that time, but it is very evident that the unit of length, the meter, as well as the other units of the metric system, did not find favor in the United States.

2—It is claimed that the metric system has made no headway through its own practical worth, and that wherever adopted it was by arbitrary legislation. For example: Take the case of Germany—here in 1871 the need for a uniform system of weights and measures was extremely great, and Germany only standardized on the metric system in order to cure the diversity of weights and measures used in the various provinces. This action was decided to be the shortest cut toward uniformity, and preferable to a compromise between the standard of the many provinces that made up the new empire.

3—There never has been any popular demand for a change from our present system of weights and measures to the metric, or to any other system. As far back as 1817, the senate called for a report on weights and measures, with a view to fixing the standards for the United States; and Sec. of State John Quincy Adams submitted a report in 1821. Sec. Adams, in his report, recommended that no change in the existing "English Standard" of weights and measures be attempted, consequently, the change to the metric system which had been advocated, was not made.

4—Since 1866, the metric system has been taught to a large extent in the public schools of the United States. Periodical campaigns of education have also been carried on in the press and in the class room, and yet, with few exceptions, the progress made in the use of the metric system has been restricted, for the most part, to the higher branches of science. From this it is deducted that in order to bring about a change from the present "British Standards" to the metric system, the people of this country must be compelled to use the metric system and, moreover, that they must also be prohibited by law from using the English system of weights and measures.

5—It is also claimed that the terms, figures and characters, in common use in our system of weights and measures are as much a part of the English language as any other portion of



The Four Improved Bars for Opening Grain Doors. See facing page.

that language; and it is questioned, whether weights and measures, so deeply rooted in the life of the people, could be changed by legislation, unless the enforcement of such legislation was most drastic and rigid.

6—It is further claimed that if the substitution of a new system of weights and measures was thought impractical 100 years ago, when the change from one system to the other was comparatively easy, how much more impractical is the proposition today, when the task is out of all proportion greater. The cost of such a radical change would be prohibitive; the confusion staggering.

7—As an offset to some of the advantages claimed for the metric system, the following is advanced:

a—Names are too long to express things in frequent use.

b—Composition of these names present to the mind a combination of several ideas in order to designate individual objects. A comparison made between English and metric names gives us the following:

English—Mile, furlong, rod, yard, foot, inch, line, acre, pound, ounce, gram, grain, bushel, peck, gallon, quart, pint and gill.

Metric—Myriameter, kilometer, hectometer, dekameter, meter, decimeter, centimeter, millimeter, kiloliter, hectoliter, dekaliter, liter, deciliter, centiliter, milliliter, hectare, are, centare, myriagram, kilogram, hectogram, dekagram, gram, decigram, centigram, milligram.

While many other arguments for and against the metric system might be quoted, I believe the above review, in a general way, covers the ground. There are, however, other features worthy of mention, as follows:

The Metric System and The Grain Dealer:

1—How would the adoption of the metric system affect the grain man? Take the matter of scales—the cost of adapting the present day scale to the metric system, while large, would not be prohibitive. The present scale parts could all be used, with the exception of the beam and hanger weights, so that at most, it would mean that the scales would have to be equipped with new beams graduated and sealed in accordance with metric units.

2—What about the price per bushel of grain? Will the bushel be changed to some decimal figure of the metric system? If this be the case, and we start on an entirely new basis, the problem, probably, will not be complicated, except in making comparison between the new bushel and the old dollar.

On the other hand, if we cling to the bushel measure and express its value in metric pounds, we surely will run into fractions. For instance: A bushel of oats would be expressed as 14.51488 kilograms, while a bushel of wheat would be written as 27.2154 kilograms. From all this you can readily see that in order to reap the benefits of simplicity, alleged to accrue from the adoption of the metric system, we shall be obliged to change our bushel to conform with even units of the new system.

Another proposal: It has been suggested that our present system of weights and measures might be greatly improved through:

1—Displacing all dry measures by weight measurement.

2—Having a single standard of unit for a ton, pound and quart. At present we have two tons, a "long" and a "short"; two pounds, "avoirdupois" and "troy"; three quarts, "liquid," "dry" and "imperial."

3—By adopting the decimal system to our present weight and measure units, wherever practical. There is no reason why the units of our present weights and measure system cannot be divided by decimals. A better relation between 100 cents in the dollar and 100 pounds in a hundredweight could be brought about, and I believe this change in the standard bushel would result in benefit to all concerned, since it makes for simplicity. For example: It has been suggested that 100 pounds could constitute a bushel of any kind of grain. Under the metric system, the unit 100 kilograms, approximately 220 avoirdupois pounds, would probably be too large as a basis for a bushel. However, 50 kilograms, approximately 110 avoirdupois pounds, or even 25 kilograms, approximately 55 avoirdupois pounds, might be designated a bushel.

The basis for the British-American system as well as the metric system is, of course, arbitrary, and this applies equally to the Winchester bushel, and all are, of course, subject to revision if such revision is justifiable by the results expected.

AUTHORIZATION of the appropriation for construction of highways in co-operation with the states of \$65,000,000 in the fiscal year ending June 30, 1923, and \$75,000,000 for the fiscal year 1924 is carried by a bill recently introduced by Rep. Dunn, of New York.

Pigs worth more than \$50,000,000 died this spring from diseases resulting from lack of vitamins in their feed, according to a statement made before a meeting of the American Chemical Society recently by J. S. Hughes and H. B. Winchester, of the Kansas Agricultural Experiment Station. They said that too much corn is fed to pigs.

Chokes.

BY CAL.

INSTRUCTIONS for cooping a car with a broken end post: Don't try.

DUMP IRONS that wiggle on their shafts may some day wiggle a horse into the sink.

GOING to struggle another season with that old loading spout that has holes in every joint?

It is an opportune moment for getting a new car mover to take the place of the old finger masher.

THE SCALE that is not in tune makes a funeral dirge instead of wedding march out of the firm's bank account.

A TIGHT SLIDE for bin discharge gates, and one that is easily operated, is an effective cure for one of the causes of mixed grain.

A LADDER with large hooks at the upper end and with sharpened steel spikes at the bottom, will give practical assurance against a nasty fall.

COVERS, caps or other dust excluding devices were not put on the oil holes of bearings just to give some workman an opportunity to leave them off.

THE CHAIN DRAG is usually out of sight. Never should it be out of mind. Moreover, it is quite essential that the bearings be kept clean and well oiled.

A SOCKET WRENCH for use on the nuts of the bucket bolts is a handy tool to have around the plant. One with a long shank and made to work in a bit brace is desirable.

WHEREVER grease cups are used for lubrication a high pressure grease feeding system will make the elevator man's work easier and give him less excuse for neglecting the bearings.

THE very fact that the elevator has received little repair work during the past two years is all the more reason why it needs a lot of attention before grain moves this summer and fall.

WHEN a motor is set on a sliding base, that base was put there for a reason. Keep the belt at the proper tension. Proper tension does not mean too tight. Be sure, also, that the ma-

chine is kept in alignment, otherwise there will be unequal strain on the bearings.

MANY of the distributors that do not function properly are only afflicted with a case of chronic dirtitis. The makers recommend a liberal application of elbow grease as a remedy for the condition.

WHEN every number on the counter of the automatic scale is accounted for, that's a record. When there is a skip of one or more, that's a chance for the claim agent to suspect the whole of the remainder.

THE MAN who drives an automobile when he knows the steering apparatus to be defective is a fool who lives midway between a hospital and an undertaking establishment. The hospital doors may be closed to the one who carries a lighted oil lantern into a dusty pit.

CLOSING the ends of boot pulleys, making them in effect solid, will make it much easier to keep the boot clean. One method is to use a split steel plate which has a hole to pass around the shaft. Any closure means must be absolutely dust tight. If it is not, fine dirt will accumulate inside the pulley.

EVER OPEN a bin gate, start elevating, and on coming back later find the gate had worked shut and the cups were running empty? So have the rest of us. It's because the gate control mechanism is of the makeshift type. A rack and pinion gate costs a little more than the ordinary kind, but it stays where it is put.

ALL of Uncle Sam's money making machinery cannot turn out enough of the shining metal and crinkling notes to compensate for the suffering an employee undergoes when he becomes entangled in a revolving shaft or falls a victim to any other improperly guarded mechanical device. But the cost of a good guard is very low.

Northwestern Ohio Dealers Meet.

A meeting of the Northwestern Ohio Grain Dealers Ass'n was held at Rudolph, O., May 1, with a good attendance. Among the numerous questions discussed were "The Duties of a Manager," by Mr. Dickey; and "The Manager in His Social Principles Should Be Adapted to the Community," by Mr. Croninger of Grand Rapids, O.

A discussion of shipping mixed grain and its results was participated in by the managers and the members of the Toledo Produce Exchange.

J. M. Sweet, pres. of the Liberty Grain Co., Rudolph, delivered a short address on "How Good Management Has Turned the Stockholders to Be Loyal to the Company." Adjournment was then had for refreshments.

Concrete Elevator at Malta, Ill.

A concrete grain elevator of pleasing proportions has been erected for George F. Ollman at Malta, Ill., and is shown in the engraving herewith.

Malta is situated in a prosperous corn, oats and dairy farming county, DeKalb, 60 miles west of Chicago, on the Chicago & Northwestern Ry.

The elevator has two dumps and nine small bins of various sizes, giving a total capacity of 30,000 bus. Close by is the two-room neat concrete office building, its roof set off with a parapet harmonizing with the appearance of the cupola on the main building.

The central driveway makes it easy to elevate from the two dumps by the single leg with 10x5½ V-buckets. The truck dump is all steel, with ball bearings, made by the Kewanee Implement Co. The Fairbanks Truck Scale has 10-ton capacity; and the automatic scale is a 10-bu. Richardson. A Western Manlift gives easy access to the cupola; and ample power is furnished by the 10-h.p. electric motor. The house was designed and erected by Townsend B. Smith.



Concrete Elevator at Malta, Ill.

Grain Trade News

Reports of new firms, changes, deaths, casualties and failures; new elevators, improvements, fires and accidents are welcome. Let us hear from you.

CALIFORNIA

Downey, Cal.—W. L. Henry, one of the proprietors of the Downey Grain Co., died April 21 from burns received in an oil station fire.

Susanville, Cal.—J. A. Noggle & Son will erect a mill and elvtr. here, the mill to be of reinforced concrete and the elvtr. of concrete or steel.

Los Angeles, Cal.—We commenced doing business here April 1, and will handle a general line of grain, beans and feed.—White-Miller Grain & Supply Co., J. E. Miller.

Galt, Cal.—The construction of a grain elvtr. is being contemplated by the local farm bureau center, according to A. E. Lindstrom, pres. of the Farm Bureau Elvtr. Corporation.

Modesto, Cal.—The poultry and stock feed, bean and grain cleaning and storage departments of the A. B. Shoemaker Co. have been established in the main warehouse of the company.

Lincoln, Cal.—Work has been started on the new 33,000-bu. elvtr., and it is expected to be completed in time to handle the grain crop. Plans for the erection of this elvtr. were made only a short time ago by the farmers.

Lincoln, Cal.—The new elvtr. planned by the farmers of this place will have a capacity of 43,000 bus. and will be equipped with a cleaner, 20-ton scale and barley roller. The contract has been given and building already is in progress.

CANADA

Vigor, Sask.—An elvtr. which will have the capacity of 30,000 bus. is being erected here by the State Elvtr. Co.

Winnipeg, Man.—The Winnipeg Grain Exchange has adopted Chicago's trading time which will be, in Winnipeg, 8:30 to 12:15 and 11 o'clock on Saturday.

Montreal, Que.—James Richardson & Sons, Ltd., grain exporters, recently leased an entire floor in the Furness House, a new building, and have moved from their former headquarters in the Board of Trade Bldg.

Fort William, Ont.—Under construction at the present time are the 250,000-bu. elvtr. for Parrish & Heimbecker; 1,500,000 bus. additional storage for Jas. Richardson & Son, and 2,000,000 bus. additional storage tanks for the Northwestern Public Elvtr. Several others are under contemplation.—F. Symes, Grain Inspector.

Arcadia, Sask.—After the two recent fires of the N. Bawlf Grain Co. and the Northern Elvtr. Co.'s elvtrs. the Grain and Insurance Guarantee Co. of Winnipeg conducted an investigation which has resulted in the arrest of several grain buyers and farmers who are charged with issuing fraudulent grain tickets, including agents of the above mentioned grain companies.

Winnipeg, Man.—In the case of the Manitoba Grain Co. the Manitoba Court of Appeals held section 215 of the Grain Act was beyond the powers of the Dominion Parliament. The fine of \$500 imposed on the grain company for selling grain without a license by the police court last year is set aside. This section of the act stated that "no person shall engage in the business of selling grain on commission or receive or solicit consignments of grain for sale on commission in the western inspection division without first obtaining such annual license from the board."

COLORADO

Arriba, Colo.—Fred Mosher is doing general repainting on his elvtr. here.

Eckley, Col.—We will install motors in our plant here.—O. M. Kellogg Grain Co., Denver, Col.

Merino, Col.—The elvtr. formerly owned by the Ashcraft Grain Co. of Sterling has been sold to W. C. Harris of that place.

Deertrail, Colo.—Ady & Crowe Mercantile Co. of Denver, has a loading station here.—Deertrail Farmers Union Elvtr. Co., Fred I. Nicholl, mgr.

Willard, Col.—The elvtrs. of the Ashcraft Grain Co. located here and at Logan have been sold to F. W. Gilliland of this place. The Ashcraft Grain Co. is situated in Sterling.

Haxtum, Colo.—The Colorado Mill & Elvtr. Co. recently let contract to the Burrell Engineering & Construction Co. for a 40,000-bu. reinforced elvtr., a duplicate of the house erected at Collyer, Kan.

Greeley, Colo.—The Colorado Mill & Elvtr. Co. has let contract to the Burrell Engineering & Construction Co. for a 200,000-bu. reinforced, concrete elvtr., a large flour warehouse and a concrete building to house a 1,000-bbl. flour mill.

Denver Col.—The Continental Grain Co. was organized a month ago to succeed the Denver branch of the Hall Baker Grain Co. of Kansas City. J. M. Chilton who was in charge of the Hall Baker concern, will also act as mgr. of the new organization.

Otis, Colo.—The Otis Grain Co. bot the Farmers Elvtrs. at Otis and Platner in January, and then sold the Platner house to Mr. Gailey of Franklin, Neb., who is running it. Mr. Husted of Otis is receiver for the old company. We started buying grain Feb. 3, 1922, and are incorporated with \$25,000 capital stock.—O. R. Millen, mgr. Otis Grain Co.

IDAHO

Eden, Idaho.—T. G. Wilson, pres. and mgr. of the Farmers Mlg. Co., died Apr. 21, at a hospital after an operation. He is survived by his widow and a daughter.

Malad, Idaho.—The Oneida Farmers Union has completed arrangements to again operate its three elvtrs. located at this place, Holbrook and Ridgeland. Some time ago, financial conditions made it necessary to lease the elvtrs. to the Globe Grain & Mlg. Co. The company is incorporated for \$250,000 and beside owning the elvtrs. it operates two flour mills and three stores in this vicinity.

ILLINOIS

Lintner, Ill.—F. L. Evans & Co. recently bot the elvtr. of the American Grain Co.

Padua, Ill.—William Dixon has succeeded J. Chubbuck as mgr. of the Padua Grain Co.

Findlay, Ill.—W. D. Bradley has succeeded E. S. Combs as mgr. of the Findlay Grain & Coal Co.

Le Roy, Ill.—S. P. C. Garst with W. A. Webb and formerly Le Roy mgr. for Harrison & Ward, is dead.

Richards Crossing (Grand Ridge p. o.), Ill.—John Baumgardner has assumed charge of the elvtr. here.

Belvidere, Ill.—W. L. Krans recently succeeded C. W. Grosvenor as mgr. of the Farmers Co-op. Elvtr. Co.

Arthur, Ill.—Wells Bros. have been succeeded by J. E. Collins of Garrett. His son will manage the elvtr.

Henning, Ill.—R. C. Wilson died April 18 after a protracted illness. He was mgr. of the grain elvtr. here.

Homer, Ill.—The Farmers Elvtr. Co. will continue in business. Mgr. Byers has been replaced by Tom Morrison.

Adair, Ill.—A Hall Signaling Grain Distributor has been installed in the elvtr. of the Farmers Elvtr. & Produce Co.

Barnes (Normal p. o.), Ill.—Our elvtr. here has been leased to A. A. Delong.—Harrison, Ward & Co., Clinton, Ill.

Blue Mound, Ill.—Crow & Co. are building a new brick office building and putting in a new scale.—Farmers Grain Co.

New Douglas, Ill.—The Prange Mlg. Co. is contemplating the purchase of a wheat separating machine, also a wheat scourer.

Greenville, Ill.—Jake Henry, who has been mgr. of the Farmers Grain Co. for some years died from cancer a short time ago.

Donnellson, Ill.—I am thinking of putting in big scale to weigh heavy trucks.—J. M. Hampton, mgr. Donnellson Farmers Equity.

Sutter Siding (Hopedale p. o.) Ill.—David Bender is now mgr. of the Farmers Grain Co., succeeding Charles Graff, who died recently.

Arcola, Ill.—Bold burglars entered the office of the Farmers Elvtr. Co. recently and tried to open the safe. They succeeded in wrecking it but that was all.

Fisher, Ill.—Chas. E. Gilman, formerly mgr. of the Sharp Farmers Elvtr. Co. at Thomasboro, purchased the Reardon & Harman Elvtr. and has taken possession.

Clinton, Ill.—Harry Scott formerly with Thorpe Scott & Co. of Wapella, has succeeded E. W. Blue as mgr. of the De Witt County Co-op. Grain Co.—H. Scott.

Danvers, Ill.—The erection of an elvtr., coal pocket, office and warehouse is being planned by the Danvers Farmer Elvtr. Co. William Zierfuss is in charge of the company.

Mulberry Grove, Ill.—We are building at Mulberry Grove an iron clad elvtr., equipped with auto truck scale and auto dump.—Valier & Spies Mlg. Co., St. Louis, Mo.

LaPrairie, Ill.—Stockholders of the Chatten-LaPrairie Elvtr. Co. are contemplating the establishing of two separate businesses, one at this place and the other at Chatten.

Greenville, Ill.—We are repairing our elvtr. We have added sugar storage and also have increased our flour storage.—Greenville Elvtr. Co. Inc., per F. J. Malan, sec'y and treas.

Ransom, Ill.—The Farmers Elvtr. Co. is the defendant in a \$1,000 assumptit suit brot against it by a farm owner as a landlord's lien to collect for grain sold and delivered by a tenant.

Springfield, Ill.—The state constitutional convention on May 1 struck out the section of the warehouse article, the objections to which were fully stated in the Journal Mar. 10, page 314.

Cisco, Ill.—The American Grain Co. of Decatur and Springfield, recently sold its elvtrs. at this place and at Lintner to F. L. Evans & Co., who will operate the Cisco plant under the name of the Pratt County Elvtr.

Langham (Waupeonsee p. o.), Ill.—Mark T. Welsh has let contract to Geo. Saathoff for a 25,000-bu. cribbed iron clad elvtr. with 1 leg 12x 6-inch V-shaped cups, six bins, one truck, dump, manlift, Richardson Automatic Scale, gasoline power.

Edwardsville, Ill.—The sum of \$15,000 will be expended on improvements on the elvtr. of Dipold Bros., who have already had some interior improvements made. One side of the building will be raised two stories and feed grinding machinery will be installed.

McHenry, Ill.—The McHenry Flour Mills has let a contract to the Burrell Eng. & Construction Co. for a 10,000-bu. wood elvtr. adjoining their mill. This plant just recently issued a contract to the same construction company for the erection of a cleaning and transfer house.

Forsyth, Ill.—Victor Dewein, who operated an elvtr. at Warrensburg some years ago, recently bot the elvtrs. located at Forsyth and Emery from the American Grain Co. The latter company has also sold its elvtrs. at Cisco and Lintner to F. L. Evans & Co. Mr. Dewein will be located at Forsyth.

Griggsville, Ill.—The Co-op. Elvtr. Ass'n has let contract to Geo. Saathoff for a 12,000-bu. cribbed, iron clad elvtr. to contain one leg with 11x6-inch V-shaped cups, manlift, one dump, six bins, Richardson Automatic Scale, a cleaner, one 7½-h.p. motor for cleaner and a 7½-h.p. back geared motor for leg.

Champaign, Ill.—My son, H. H. Rose, whom I took to San Antonio, Tex., for the benefit of his health, passed away Apr. 7. He was mgr. of the Bondville Grain Co., Bondville, Ill., for three years, but had to resign last fall account of his health.—Fred Rose.—Mr. Rose owned an elvtr. at Homer several years ago.

Williamsburg, Ill.—R. E. Bowers has let contract to George Saathoff for a 10,000-bu. studded elvtr., one leg with 15x7 buckets, 8-bu. Richardson Automatic Scale, one dump, manlift, rope drive from 10-h.p. gas engine. House will be ready for the new crop. This will replace the elvtr. that was burned last July.

Minier, Ill.—The Minier Co-op. Co. will have a large concrete storage tank built; the work will be done by the Elkenberry Construction Co.

Adair, Ill.—Work has been started on the construction of the new elvtr. of Bader & Co. A Hall Signaling Grain Distributor will be installed.

Ridge Farm, Ill.—We have bot an elvtr. and expect to start in doing business as soon as a few repairs can be made.—Ridge Farm Co-op. Grain Co., J. C. Jones, mgr. The Frank Jones Grain Co. writes that it has sold one of its elvtrs. at this point presumably to the above company which was recently incorporated.

CHICAGO NOTES.

The Nye & Jenks Grain Co. recently increased its capital stock from \$250,000 to \$1,000,000.

Part of the room or about 550,000-bu. of the Keystone Elvtr. will be used for public storage.

Alexander Moore, for three years with Hulburd, Warren & Chandler, has gone with Frank Marshall.

Dean, Onativia & Co. will move into new and larger quarters in the Continental & Commercial National Bank Bldg.

Roland McHenry, for five years with Frank Marshall, resigned May 1 and went with the Nye & Jenks Grain Co.

Frank Rice and William Phelps, formerly of the Star & Crescent Mlg. Co. have sold their memberships in the Board of Trade.

Peter Gluck was recently expelled from the Board of Trade because of alleged business irregularities. Mr. Gluck is of Shepard & Gluck of Nashville and New Orleans.

The directors of the Board of Trade voted to expel from membership Fred Hanssen of New York and D. R. W. Boureau of Philadelphia for dishonorable business conduct.

Members of the Board of Trade have adopted by a vote of 448 to 38 the new rule which requires that non-member corporations give a written consent to commission houses showing that their officers have authority to trade in futures.

Pres. Robert McDougal of the Board of Trade has appointed George Wegener chairman of a com'te to draw up a uniform application blank to be used by co-op. and other non-member firms in establishing trading relations with members of the Board.

Directors of the Board of Trade at their regular weekly meeting May 9 voted that beginning May 11 the emergency rule covering carlot deliveries on track would be in force. Carload lots of grain on track may be delivered on contracts for May delivery without the necessity of passing thru a regular warehouse.

E. G. Scheckler, for 46 years connected with the Western Union Telegraph Co. and for 26 years in charge of its quotation and ticker department, died May 6, aged 62 years, of uraemic poisoning, after an illness of 6 months. He leaves a widow, son and daughter. He began his career at Racine, Wis., and became a star operator.

Richard Powell, formerly a member of the Board of Trade and known in the grain industry for the last 60 years, died a short time ago at Palo Alto, Cal., at the age of 76 years. Mr. Powell was a civil war veteran, and has served with the Board of Trade Battery. He was a brother of Samuel Powell, mgr. of the Board's clearing house.

Grain that arrives in Chicago will be properly cared for in regard to storage room and there will be no difficulty in making deliveries on May contracts. The following announcement has been given out by the directors of the Board of Trade: The directors of the Chicago Board of Trade are watching the storage situation closely and all parties interested may rest assured that the instant an emergency does exist and no storage room is available, the rule providing for delivery of grain in car lots will be invoked.

The second annual International Pageant of Progress Exposition opening Saturday, July 29, and closing Monday, Aug. 14, 1922, promises to be more successful in point of exhibits and attendance than the remarkable event of 1921. Many new features will be put on this year, including a pure food show. Foreign and the United States governments are preparing exhibits of a highly interesting character. Those who plan their vacation to include a trip to Chicago at this time will enjoy incidentally the city's advantages as a summer resort.

The price of \$438,710 was paid by the Washburn-Crosby Co. when it bot the Star & Crescent Mlg. Co. The capacity of the plant is 4,000 bbls. of flour daily, with large wheat storage.

New members of the Board of Trade recently admitted to membership are John H. Simon of New York, Clarence C. Hobson, Chas. E. Thayer, Minneapolis; Chas. F. Sommer, Saginaw, Mich.; Tom J. Garrison; Geo. A. Hill; Geo. S. Kemp, Richmond, Va.; Chas. I. Rini, Philadelphia; John Hayes, Wichita, Kan.; and Oscar E. Martin, Duluth. Application for transfer of membership has been made by Wm. E. Patterson, Richard S. Salter, Estate of Henry I. Morris, Estate of M. H. Simons, Estate of Carl H. Thayer, Wm. H. Johnston, Roy S. Van Borg, Chas. B. Suter, Sidney H. Warner and Howe G. Baxter. Chas. P. Andrews of Baltimore has been suspended from membership. Memberships are selling at \$6,700.

INDIANA

Nabb, Ind.—C. H. Everitt is the new owner of the Eberts Grain Co.

Yoder, Ind.—The Yoder Grain Co. has succeeded the Sheldon Equity Exchange.

Bowling Green, Ind.—The Bowling Green Mills recently succeeded the Bowling Green Mlg. Co.

Cynthiana, Ind.—The Newman & Smith Grain & Coal Co. has been succeeded by Harry Deig.

Jackson, Ind.—I intend to equip my elvtr. here with electric motors.—G. G. Davis, Tipton, Ind.

Thorntown, Ind.—Matthew T. Harris has been appointed receiver for the Thorntown Grain Co.

Goldsmith, Ind.—I intend to equip my elvtr. here with electric motors.—G. G. Davis, Tipton, Ind.

Roann, Ind.—Kinsey Bros. Elvtr. here was damaged by the recent storms and floods in this vicinity.

Moran, Ind.—I am contemplating the installation of new wagon or truck dump scales.—Otto Lefforge.

Horton (Hortonville p. o. name), Ind.—The Horton Elvtr. Co. has succeeded the Farmers Co-op. Co.

Denver, Ind.—We will install motors and attrition mill this spring.—Mayer Grain Co., E. S. Kline, mgr.

Cumberland, Ind.—The Farmers Terminal Grain & Feed Co. is installing new machinery at their plant here.

Lawrence, Ind.—The grain elvtr. here of the Farmers Terminal Grain & Feed Co. of Cumberland, Ind., is nearing completion.

Mulberry, Ind.—The Mulberry Grain Co. tore its old elvtr. building down last month. The elvtr. now in operation was erected in 1919.

Goshen, Ind.—We will enlarge our storage room so that we can carry more rye, oats and corn, and will install scales.—Goshen Mlg. Co.

Goodland, Ind.—The Farmers Co-op. Co. recently installed an electric motor and has sold its boiler, engine and large smoke stack to operators of a stone quarry.

Huntingburg, Ind.—The new mill of the Wallace Mlg. Co. was opened for business on Apr. 21. It has a capacity of two 150-bbl. units and one unit is being operated.

Dunkirk, Ind.—Morgan & Anderson of Greenville, O., and formerly in business at Lynn, Ind., have bot the elvtr. of Shirley Bros., formerly owned by W. L. Skinner.

Waveland, Ind.—The Newton Busenbark Grain Co. which recently leased the elvtr. here owned by Smith & Stewart, is planning to operate the house until the Stewart estate is settled.

Centerton, Ind.—After this, my address will be Lebanon, Ind.—H. C. Clark. Mr. Clark was formerly mgr. of the Centerton Grain Co., where he is succeeded by J. B. Ermentrucht.

Hedrick, Ind.—Damage done to the elvtr. of Seeger & Betts by the recent windstorm is estimated at \$15,000; insured. Lumber for the erection of the new elvtr. on the same site has arrived.

Chesterfield, Ind.—Heavy rainfall recently caused the basement of the Goodrich Bros. Hay & Grain Co. to fill with water to such a depth that it was necessary to suspend operations for a short time.

Portland, Ind.—We have just installed a new 3-pair high meal mill made by the Barnard & Leas Mlg. Co. No other repairs will be made by us except repairs and general overhauling.—Haynes Mlg. Co.

Onward, Ind.—The buildings, fixtures and machinery of the Onward Elvtr. Co. were sold at receiver's sale on April 29. David Cripe acted as receiver for the company. He was appointed in January.

Randolph, Ind.—Fred Elliott is the successor of the elvtr. formerly operated by Richards & Ross. The latter concern has been located at Glen Karn, O., under the name of Richards & Simpson for some months.

Roanoke, Ind.—The Roanoke Elvtr. Co. recently incorporated for \$10,000, to operate a grain elvtr. and deal in merchandise and farm produce. Incorporators: James Landrigan, Bryce Ferguson, John Keener, S. G. Bear and P. C. Sibert.

Seymour, Ind.—Worth Clark of Brownstown, has been elected to succeed Clifford Jackson as mgr. of the Farmers Co-op. Elvtr. Co. This company also operates the feed exchange at Brownstown where Mr. Clark will maintain his residence for some time.

Indianapolis, Ind.—Charles B. Riley, sec'y of the Indiana Grain Dealers Ass'n is leaving for the West the early part of May because of poor health. He expects to return about the first of July, but has arranged to have a successor, Charles A. Rouse, in the field.

Petersburg, Ind.—B. F. Gump will furnish the machinery for our new elvtr. Our officers are E. J. Whitelock, pres., George Frank, vice-pres. and H. B. Whitelock, sec'y and treas.—Petersburg Mlg. & Grain Co.—This company, which is erecting a \$20,000 elvtr. was formerly known as the Whitelock Mlg. Co.

Lawrenceburg, Ind.—We are constructing a 3-story flour and feed warehouse with capacity of 10,000 bbls. of flour. Contracts have all been let and the building is about 50% completed. We expect to have it finished before the new crop.—Lawrenceburg Roller Mills Co., Frank Hutchinson, sec'y and mgr.

Patoka, Ind.—A grain elvtr. will be erected at a point just north of here by Iglehart Bros. of Evansville. The capacity will be several thousand bus. and it will be of concrete construction. It is expected to be completed in time to take care of the coming wheat harvest. Lee White will have charge of the elvtr.

Washington, Ind.—The flour mill of the Spink Mlg. Co. was burned on April 22, incurring a loss of approximately \$40,000, about half of which is covered with insurance. It is that that the fire may have originated from crossed electric wires. The company is owned by Dr. T. F. Spink and Frank Keith. The mill will be rebuilt.

Hanna, Ind.—We are now ready to go ahead with our grain elvtr. here. We gave up building last year when the farmers organized, but they decided to liquidate and disorganize at their last meeting so we will now put up a 15,000-bu. plant here and handle in connection with our other lines. We are now putting in a private switch from the Pennsylvania Railroad and have built 80 feet of storage sheds.—Andreas Lumber Co., F. L. Yoeman, sec'y-treas.

INDIANAPOLIS LETTER.

The Red-E-Mix Products Corp. recently incorporated for \$150,000, to manufacture grain and cereals. Incorporators: Paul LeGore, J. S. Wigle, Henry Miller, Douglas Pierce and R. M. Barbour.

Indianapolis, Ind.—The Farmers Terminal Grain & Feed Co. which has branch elvtrs. at Lawrence and Cumberland, is ready to equip the Cumberland plant into a modern flour mill to manufacture their own "Red Line Flour" and wheat products. This plant has about 435 stockholders and will increase its capital stock shortly.

EVANSVILLE LETTER.

Iglehart Bros. have paid into the probate court here nearly \$12,000 to be divided among 12 farmers for wheat which was transferred by the Akin-Erskine Mlg. Co. now in bankruptcy court, to Iglehart Bros. The latter company said they were willing to pay the account at the time the suit was filed a short time ago, but wanted to go thru the court to determine to whom the money should be paid.—C.

It is expected there will be many bidders for the flour mill and grain elvtr. of the Akin-Erskine Mlg. Co. in this city, that will be sold by Harry Voss, trustee in bankruptcy on May 10. It is rumored that a company of local capitalists may buy up the property which is valued at several hundred thousand dollars. The company was thrown into bankruptcy several months ago.—C.

Arthur Cox, 54 years old, for many years connected with local flour mills and grain elevators, died a short time ago at Indianapolis, where he has lived for two years. He is survived by his wife, one son and several brothers and sisters.—C.

IOWA

Berkley, Ia.—Carlson & Peterson will remodel their elvtr. Lee Peterson has the contract.

Whittemore, Ia.—O. J. Kaschmitter has been having his elvtr. machinery overhauled recently.

Roland, Ia.—The Farmers Elvtr. Co., which up to this time has been handling coal, has discontinued that line.

Des Moines, Ia.—Fire broke out in the warehouse of the Pease Hay Commission Co., Apr. 26, causing \$30,000 loss; insured.

Clinton, Ia.—The King Wilder Grain Co. recently disposed of all its holdings except the elvtr. to the Equity Co-op. Trading Co.

Kinross, Ia.—The Liberty Lumber Co. will build a new attrition mill, sheller and corn crusher. Lee Peterson has the contract.

Pierson, Ia.—A Richardson Automatic Scale having the capacity of 2,000 bus. per hour has been installed in the plant of the Farmers Elvtr. Co. here.

Ionia, Ia.—Sam Murphy, a grain buyer, died here recently as a result of injuries sustained when he was struck by a passenger train on Apr. 4, at Waterloo.

Cedar Rapids, Ia.—Charles Minor is retiring from the grain trade because of ill health. His business will be conducted temporarily by his brother, Harry Minor.

Lake View, Ia.—Dan Quinlan has been appointed temporary mgr. of the Farmers Union Grain Co. until the annual meeting in June. He succeeds E. C. Sherwood.

Thor, Ia.—S. K. Tokheim of Story City who has been conducting an elvtr. and grain business here, has been charged with embezzlement and has surrendered to the authorities.

Ferguson, Ia.—The company has just completed building a new driveway to the dump. It was also voted to change to the co-op. plan.—Farmers Elvtr. Co., Staley J. Clemmer, mgr.

Middletown, Ia.—The elvtr. of the Middletown Co-op. Elvtr. Co. was burned Apr. 23. The loss has not been estimated but it is said there was a large quantity of grain stored in the elvtr.

Bradgate, Ia.—The Bradgate Co-op. Exchange is being organized; Vernon Coffin has been chosen as sec'y-treas., and the new company has rented the elvtr. now operated by the Quaker Oats Co.

Ladora, Ia.—F. M. Rogers is the new mgr. of the Ladora Lumber & Grain Co. He was formerly in charge of the Cartersville Farmers Supply Co. of Cartersville where he has been succeeded by Art Shellington.

Lamoni, Ia.—Joseph Williams, a would-be thief scarcely out of his teens, has been sent to the penitentiary for ten years, indeterminate, for entering the office of the Iowa-Missouri Grain Co. and leaving the safe bereft of \$21.65 in cash and \$39.26 in checks.

Webster City, Ia.—We are putting on composition roofing, fireproof, also repainting and repairing the elvtr. Our fire loss was about \$800, covered by insurance.—Webster City Elvtr. Co.—First reports of this company's recent fire gave the loss at approximately \$2,000.

Lake City, Ia.—L. H. Adams & Co. will remodel and enlarge the elvtr. they bot of the receiver of the Farmers Elvtr. early this year. They will nearly double the capacity, it will be iron clad and have an asbestos roof. A hopper scale will be installed.—J. B. Adams, Omaha, Neb.

Essex, Ia.—Creditors of the defunct Farmers Co-op. Exchange are contemplating the organizing and purchasing of the properties not in excess of the company's indebtedness, that they might sell the elvtrs. at Coburg and Shenandoah. It is then their idea to re-organize the plant at Essex.

Cedar Falls, Ia.—We have no intention of moving our main office from Waterloo to Cedar Falls and abandoning our Waterloo mills, as reported. We are now operating at Waterloo and Cedar Falls and expect to continue to do so unless something unforeseen happens to change our plans.—Waterloo & Cedar Falls Union Mill Co., Glenn C. Brown, sec'y and mgr.

Whittemore, Ia.—D. W. Ault of Pomeroy has been elected mgr. of the Whittemore Elvtr. Co.

Washta, Ia.—My office was entered on the night of Apr. 23 by prying up a window and breaking a sash lock, and as the safe was not locked, the thief had no trouble in his search. A lock on an iron drawer in the safe was punched off but as there was nothing in the drawer but wind, no great damage was done. The only thing of probable value in the safe was some notes which are about as valuable as a membership the U. S. G. G., Inc., and they were left. I am of the opinion it was the work of someone who has imbibed too much of the farmers' friend agitators and believed that all grain dealers have money all over the premises. He found me as I think he would find nearly all country grain dealers who have no money and who take it home with them at night.—J. K. McGonagle.

KANSAS

Stockton, Kan.—J. M. Frieze recently became mgr. of the Rogers Grain Co.

Rexford, Kan.—Fred Mosher is remodeling his elvtr. here and installing motors.

Lillis, Kan.—The Lillis Elvtr., owned by Barrett & Walker was burned Apr. 26.

Morganville, Kan.—The Associated Mill & Elvtr. Co.'s elvtr. here was closed Apr. 1.

Whitewater, Kan.—We have purchased three auto truck dumps.—Whitewater Flour Mills Co.

Morganville, Kan.—R. E. Miller is equipping his elvtr. with a Hall Signaling Grain Distributor.

Belpre, Kan.—The Farmers Grain Co. is installing a F-M 10-ton Truck Scale.—J. F. Ward, Mgr.

Cicero, Kan.—The Farmers Union Co-op. Wheat Growers Ass'n recently incorporated for \$10,000.

Quinter, Kan.—Mail addressed to the Jones-Rogers Grain Co. is returned marked "Unclaimed."

Brookville, Kan.—A Hall Signaling Distributor will be installed in the elvtr. of the Farmers Co-op. Elvtr. Co.

Stockton, Kan.—The E. F. Jones Grain Co. is not operating now.—Farmers Union Elvtr., D. E. Wallace, mgr.

Brookville, Kan.—Three Hall Signaling Grain Distributors will be installed in the new elvtr. of Mrs. T. B. Kelly.

Lenora, Kan.—W. L. Turner has been charged with having set fire to the elvtr. of the Turner Grain Co. last October.

Oketo, Kan.—W. H. Page has assumed charge of the Farmers Union Co-op. Ass'n, succeeding E. T. Smith in this capacity.

Barnard, Kan.—The C. E. Robinson Grain Co. is installing a truck dump in its plant.—Jackman Roller Mill, H. M. Jones, mgr.

Lebanon, Kan.—We are having some repairing done and resetting hopper scale.—Lebanon Mill & Elvtr. Co., C. M. Isom, sec'y-treas.

Hardtner, Kan.—We are taking down our old coal bins and building new ones.—Southwestern Elvtr. & Merc. Co., C. W. Lewis, mgr.

Kanorado, Kan.—Fred Mosher recently bot a Hall Signaling Grain Distributor for his elvtr. here which he is rebuilding and enlarging.

Stubbs Station (Kiowa p. o.), Kan.—We will enlarge our elvtr. here.—Southwestern Elvtr. & Merc. Co., C. W. Lewis, mgr., Hardtner, Kan.

Emporia, Kan.—The City Mill & Elvtr. will change from steam to electric power about June 1. Two electric motors have been ordered.

Valley Falls, Kan.—E. L. Jorden of Centralia will operate the Valley Falls Elvtr., having taken it over from B. C. Ragan and W. A. Blake.

Wichita, Kan.—L. R. Wurd and S. H. Ranson have transferred their memberships in the Board of Trade to W. M. Marshall and Roy Denton respectively.

Burns, Kan.—L. H. Powell & Co. are contemplating the erection of an elvtr. here as their lease on the elvtr. of J. C. Lilley & Co. expires this spring.

Collyer, Kan.—The Colorado Mill & Elvtr. Co. has just completed its 40,000-bu. reinforced concrete elvtr. The Burrell Eng. & Construction Co. had the contract.

Atwood, Kan.—G. W. Bastain recently sold his elvtr. here to W. R. Horton, who will operate it the coming season.—Atwood Equity Exchange, J. A. Bowles, mgr.

Hutchinson, Kan.—Carl Hipple has been elected pres. of the Chamber of Commerce. Mr. Hipple is prominent on the Board of Trade, and pres. of the Security Elvtr. Co.

Morganville, Kan.—O. Ivar Norden, temporarily residing at Falun and formerly of Brookville, is now mgr. of the Farmers Union Mercantile business at Morganville.

Liberal, Kan.—The elvtr. I am building will be on my farm for my own use as I use a Harvester Thrasher.—A. Bozarth.—This elvtr. will have a capacity of 10,000 bus.

Alden, Kan.—We have just installed a truck and wagon dump in our elvtr. and refloored the whole driveway.—Farmers Co-op. Grain Mlg. & Merc. Ass'n, W. E. Davis, mgr.

Hazleton, Kan.—The Hazleton Wheat Growers Co-operative Ass'n has leased one of the two elvtrs. of the Vance Grain Co. on the Missouri Pacific, and will not build this year.

Dwight, Kan.—E. R. Hoyle has temporarily leased the elvtr. of the Associated Mill & Elvtr. Co. This company went bankrupt some time ago making it necessary to sell all its elvtrs.

Blue Rapids, Kan.—Barney Weeks has given up his position as mgr. of the Farmers Co-op. Grain Co. and is planning to take charge of the elvtr. of the Blue Rapids Mlg. & Elvtr. Co. at Greenleaf.

Cedarvale, Kan.—Hay barns at Hooser belonging to F. M. Hubbard and L. C. Adam Mercantile Co. of this place, were recently destroyed by fire, believed to have started from the careless discard of cigarettes.

Manchester, Kan.—The Abeline Flour Mills will build a 10,000-bu. studded, iron clad elvtr. with 5 h.p. motor, 5-bu. Richardson Automatic Scale, truck dump and a 1,500-bu. non-chokable leg. The Star Engineering Co. has the contract.

Manhattan, Kan.—The business of Geo. T. Fielding's Sons has been divided, A. P. and E. H. Fielding continuing the wholesale grain and seed business, while L. W. Fielding and D. C. Stephenson take over the retail seed, coal and feed business.

Atwood, Kan.—The old Lynn line elvtr. will be remodeled before next crop. The plans call for a new office, truck dump and new foundation, also to be rerodded. At present it is owned by a company at McDonald.—Atwood Equity Exchange, J. A. Bowles, mgr.

Seward, Kan.—The Stevens-Scott Grain Co. will build a 12,000-bu. studded, iron clad elvtr. The equipment will include a 15-h.p. engine, 4-bu. Richardson Automatic Scale, truck dump and a 1,500-bu. capacity nonchokable leg. The Star Engineering Co. has the contract.

Ellsworth, Kan.—Robbers paid a visit to the safe of the Farmers Elvtr. Co. recently where they obtained about \$900 in cash. From there, they went over to the office of the Janousek Grain Co., but the haul only amounted to about \$20. All they left was their finger prints.

Sedgwick, Kan.—J. S. and S. L. Congdon will build a 20,000-bu. studded, iron clad elvtr. Equipment will include 5 and 10-h.p. motors, Richardson Automatic Scales, Eureka Cleaners, auto truck dump and 2,000 bu. nonchokable leg. The Star Engineering Co. has the contract.

Trousdale, Kan.—The Farmers Elvtr. Co. was robbed on Apr. 26, the thieves cleverly melting off the combination of the safe and just as cleverly leaving with \$1,700 in checks, \$1,600 in notes, \$40 in war savings stamps and about \$30 in cash without leaving a finger print or foot print by which they might be tracked.

Hope, Kan.—We will rebuild our elvtr. at once, about the same kind and size.—Farmers Co-op. Elvtr. & Supply Co., W. R. Waring, pres. The original elvtr. burned recently incurring a loss of about \$13,000 which is covered by insurance, Mr. Waring states. It had a capacity of 22,000 bus. and was iron clad.

Great Bend, Kan.—Four additional tanks, 16 feet in diameter and 80 feet high, will be erected to the new elvtr. of the Walnut Creek Mlg. Co. which is being constructed. The tanks, together with the interstice bins will have a capacity of 75,000 bus. making the total capacity of the entire structure 275,000 bus. when completed.

Gardner, Kan.—The Ward Grain Co. elvtr. here which is owned by Miss Edith Ward was burned recently, the fire originating from careless tramps and their cigarettes, it is thot. Between six and seven thousand bus. of wheat were stored in the elvtr. but this was well covered with insurance. The building and machinery, not so well covered with insurance, were destroyed.

Sedgwick, Kan.—We are starting construction of a 21,000 bu. ironclad house to be built by the Star Engineering Co. of Wichita on both the Santa Fe and Arkansas Valley Interurban railway, which now has tariff connections with the Frisco. Will not build the new concrete seed house just at present.—Sedgwick Alfalfa Mills.

Atchison, Kan.—The Blair Mfg. Co., which recently lost part of its mill by fire, has commenced reconstruction and is now working on storage bins in order to operate the 500 bbl. unit. The company expects to commence the building of a 1,000-bbl. unit at its plant in the near future.—Atchison Board of Trade, R. T. Willette, sec'y.

Abilene, Kan.—T. L. Welsh has been elected pres. and treas. of the Abilene plant of the Abilene Flour Mills Co., this move being necessitated by the death of J. L. Rodney, whose position as pres. in the Kansas City office has been succeeded by H. A. Sterling. Mrs. J. L. Rodney has been elected 1st vice-pres., Walter Fincher, 2nd vice-pres. and J. J. Vanier, sec'y.

Salina, Kan.—F. O. Jones formerly of the Arkansas City Mfg. Co. of Arkansas City, recently succeeded H. E. Brooks as general mgr. of the Western Star Mill Co., the latter having resigned because of ill health. Mr. Jones has been connected with the Wichita Flour Mills Co., Wichita, the Yukon Mill & Grain Co., Yukon, Okla., and the Oklahoma City Mill & Elvtr. Co., of Oklahoma City, Okla.

Salina, Kan.—Most of the grain firms of this city have leased offices in the new building of the Farmers Union Mutual Fire & Hail Co., as has the Board of Trade and the Kansas Grain Inspection Buro. The building has four private wires connected with principal markets and plans are being made for the installation of a radio. The following companies will locate in the building: Lynch Grain Co., Bossemeyer Co., the Robinson-Wyatt Co., Dilts & Morgan, Inc., Northern Grain Co., Service Grain Co., Freeman-Faith Grain Co., John Hayes Co., E. L. Rickel Grain Co. and the Terminal Grain Co.

Wichita, Kan.—The Victory Mill & Elvtr. Co. has let contract to have an elvtr. erected here to be known as the Union Terminal Elvtr., which will have an initial capacity of 500,000 bus. to be later increased to 2,500,000 bus. It is incorporated for \$1,000,000. The workhouse will be equipped with two receiving and two transfer and shipping legs and four 2,000-bu. hopper scales, twelve 22-foot tanks. The headhouse will be 200 feet high, bins will be 105 feet high, 22 feet in diameter. The elvtr. will also have a laboratory with grain testing facilities. Officers and directors: J. W. Laporin, pres., John Madden, Jr., vice-pres., Thomas Dawkins, sec'y and general mgr., John Maddar and William Reid.

KENTUCKY

Jetts, Ky.—Our elvtr. and mill has not been sold yet. They are still operating under the same management.—J. R. Shaw & Co. It was reported last year that they would sell and go out of business.

Bardwell, Ky.—We are installing two machines for feeding phosphate into our entire output of flour, also one 500-lb. or 600-lb. batch mixer for self rising flour and a corn cleaning machine.—Harlan-Lowe Mfg. Co.

Corydon, Ky.—Hadley & Sparks, Evansville, Ind., have started work on the construction of their new flour mill and grain elvtr. here, known as the Corydon Mfg. Co., to take the place of the property destroyed by fire several weeks ago.—C.

Paducah, Ky.—Edwin C. Hawkins recently let contract to Kaucher, Hodges & Co. for the erection of a 25,000-bu. elvtr. to cost \$6,000, which will consist of concrete foundation and overhead cribbed bins with cleaner and Richardson Automatic Bagging Scale and one elvtr. leg with capacity of 2,000 bus. per hour; also a small milling outfit for making chops and meal.

LOUISIANA

New Orleans, La.—The following board of directors was elected recently by the Grain League Baseball Ass'n: M. E. Whitehead, H. L. Daunoy, G. P. Galennie and C. S. Leach. A series of 15 games will be played commencing May 7. C. C. Probst is pres.

New Orleans, La.—The new marine leg of the Public Elvtr. here has just been given a working test. It has a capacity of 15,000 bus. an hour and is designed to elevate grain out of river barges, as an addition to the pneumatic suction conveyor, which had a capacity of but 2,500 bus. an hour. This improvement in unloading facilities is timely in view of the contemplated use of the Mississippi River by the Government barge line. Formerly it required 40 hours to unload 100,000 bus. This work now can be done in 6 hours. The installation was by A. M. Crain & Co.

MARYLAND

Baltimore, Md.—Wm. H. Miller & Co., Inc., well known grain exporters of New York, have elected J. G. Oehrle to be mgr. of their office here.

Chesapeake City, Md.—J. Groome Steele, grain merchant, has filed a voluntary petition of bankruptcy. Liabilities are listed at \$226,998 and assets at \$133,476.

Hagerstown, Md.—A new No. 5 Monitor Receiving Separator and a new cyclone dust collector are being installed at the Potomac Ave. Elvtr.—C. M. Horst.

Linwood, Md.—The grain elvtr. here is for sale. It is on the main line of the western Maryland Railroad and 43 miles from Baltimore.—C. M. Horst, Hagerstown, Md.

Hagerstown, Md.—Mail addressed to Lewis S. Martin is returned marked "Removed." He was reported as having bot this concern a short time ago, then being operated by S. D. Hart-ranft.

MICHIGAN

Newaygo, Mich.—The Gleaner Clearing House Ass'n Bldg. has closed.

Muir, Mich.—E. S. Danner is successor to C. M. Stott.—W. A. Holmes.

Mesick, Mich.—The Mesick Grain Co. is talking strongly of building an elvtr.—X.

New Baltimore, Mich.—The New Baltimore Elvtr. Co. is now closed.—Geo. A. Gunst.

Romulus, Mich.—The Michigan Grain & Beverage Co. is the successor of Kingsley & Taylor.

Sandusky, Mich.—The stock of the Gleaner Elvtr. Co. has been sold and the elvtr. has been closed.

Stanton, Mich.—The Gleaner Elvtr. has closed and can not say whether it will be opened or not.—X.

Posen, Mich.—The Martindale Bean & Grain Co. is the successor of the Posen Elvtr. Co.—H. Young.

Vandalia, Mich.—The Peck Mfg. & Coal Co. is the successor of the Pears-East Grain Co.—H. J. Keen.

Marine City, Mich.—The Marine City Farmers Co-op. Elvtr. Co. will not do business or appoint a mgr.—J. Volker.

Orion, Mich.—W. E. Wilders is out of business and his elvtr. has been torn down, the site to be used for a brick yard.

Fremont, Mich.—We handle large quantities of dry beans and expect to build bean elvtrs.—Fremont Canning Co., W. A. Mee.

Riga, Mich.—Heiser Bros. sold out to the Farmers Co-op. Grain & Produce Co. which operates the only elvtr. here.—E. C. Hull.

Oxford, Mich.—The M. S. Howland Elvtr. is now operated by M. A. Kamm, proprietor of the Oxford Flouring Mill.—H. N. Marsh.

Morgan, Mich.—C. G. Munton is successor to his father, J. W. Munton, but is not operating the elvtr., so none is being operated here.—W. S. Adkins.

Hale, Mich.—The Hale Elvtr. will rebuild the elvtr. that burned, to be ready for fall business. The Grange Elvtr. Co. is planning to enlarge its plant.—A. Syze.

Rockford, Mich.—We intend to enlarge our elvtr. and put in new machinery during the coming summer.—Rockford Co-op. Elvtr. Ass'n, J. F. Eardley, mgr.

Prescott, Mich.—A recent fire here destroyed the Saginaw Mfg. Co.'s plant. Site has been purchased by Chas. Francis at Standish who is building a 16,000-bu. elvtr.—Walter Hess, Pinconning Mich.—It was formerly reported that the Whittemore Elvtr. Co. of Whittemore, had bot this site.

Branch, Mich.—The Mason County Co-op. Marketing Ass'n has organized a new branch with eighty members and has taken over the elvtr. here which will be managed by Charles Spuller.

Shelbyville, Mich.—W. E. Briggs, deceased; no successor, has taken over the business; elvtr. stands idle. Frank Chamberlain, Wayland, Mich., is administrator of the estate.—K. H. Bronard.

Lincoln, Mich.—The Lincoln Elvtr. Co. will replace its building which was burned last February by a 20,000-bu. elvtr., and a 40x150-foot warehouse. The plant will be operated by electricity.—X.

Fowler, Mich.—Marian L. Sturgis and Howard S. Sturgis have taken over the firm, Sturgis & Sons and will conduct a general elvtr., warehouse and lumber business under the name of Sturgis Bros.

Fowler, Mich.—The Farmers Co-operative Elvtr. Co. has been granted an order of court restraining Lucene Sturgis and the partnership of Sturgis & Sons from engaging in the grain business.

Pontiac, Mich.—The C. E. DePuy Co. has let the contract to L. A. Stinson for a concrete and steel elvtr. of 50,000 bus. capacity to be equipped with automatic scales, bean handling machinery and feed grinders.

Pinconning, Mich.—Martindale Bean & Grain Co. is the successor to the Kimball-Martindale Co. at this place as well as at Linwood and the other places formerly owned by Kimball-Martindale Co.—Walter Hess, Mgr.

Warren, Mich.—I have sold out to the Warren Farm Bureau of which John Reinke is sec'y. This is the only elvtr. here.—A. V. Church, N. F. Kenady, sta. agt., writes: I understand the Farm Buro will build a warehouse this year.

MINNESOTA

Welcome, Minn.—Charles Swift was recently appointed mgr. of the Welcome Farmers Elvtr. Co.

Beardsley, Minn.—We may put in a new belt to replace the chain we now have.—Dittes Bros.

Rothsay, Minn.—The National Elvtr. Co. is having repairs and alterations done on its plant. T. E. Ibberson Co. will do the work.

Rochester, Minn.—The rebuilding of the plant of the Rochester Mfg. Co. is expected to be completed in time to take care of this year's wheat crop.

Dawson, Minn.—The elvtr. owned and operated by the late T. S. Thoreson is closed at the present time. Our plans are to dispose of it.—Jas. B. Thoreson.

Comstock, Minn.—Iver Hammerud, who has been mgr. of the Farmers Elvtr. for the last 15 years, died a short time ago after being ill. He was 48 years of age and a native of Norway.

Gaylord, Minn.—The Jacob-Geib Elvtr. Co. will wreck its old elvtr. and erect a new one in its stead, contract for the same already having been given to the T. E. Ibberson Co. The new elvtr. will have a capacity of 25,000 bus.; there will be 12 bins and also a large warehouse and feed mill.

Sleepy Eye, Minn.—Edward Berkner has let contract to the T. E. Ibberson Co. for an elvtr. to replace the one that was burned. The elvtr. will have five legs, a corn sheller and cleaner, Kewanee Truck Dumps, two 10-ton scales in the driveway, 2,000-bu. automatic scale for shipping purposes, corn cribs fitted with machinery for delivering the corn from cribs to elvtr. and warehouse.

DULUTH LETTER.

C. A. Magnuson has withdrawn from membership in the Board of Trade.

James Lamb fell a distance of several stories at the plant of the Capitol Elvtr. recently, but was not seriously hurt.

Horatio Newell and G. P. Harbison, both well known in the grain industry, have organized the Newell-Harbison Co. to engage in a grain commission and brokerage business. They have located in the Board of Trade Bldg.

The proposal to make a reduction in commissions for handling wheat and coarse grains and for trading in futures was the cause of disagreement on the Board of Trade here and it was voted down so commission rates for the new crop year starting July 1, will remain as formerly.

MINNEAPOLIS LETTER.

Irving J. Stair recently was sentenced to 60 days in jail for contempt of court.

The following transfers of membership in the Chamber of Commerce have been made: W. L. Oswald to H. A. Murphy and F. C. Blodgett to B. J. Dodge.

The Chamber of Commerce voted on Apr. 29 that the present contract grades on spring wheat will be continued in effect up to and including the July, 1923, future.

We are doing general repair work as needed on our elvtr.; rebuilding coal sheds and doing about the usual upkeep repairs of the average season.—Osborne-McMillan Elvtr. Co.

E. W. Stühr and F. J. Seidl recently organized the Stühr-Seidl Co. and will do a general merchandising and commission business. Mr. Seidl will act as pres. and Mr. Stühr as sec. and treas.

Julius A. Schmahl, pres. of the Cosmopolitan State Bank, has been appointed receiver for the E. L. Welch Co. commission merchants, on creditors' petition. This company also operated in St. Paul and Duluth.

John Sweet, receiver for the H. Poehler Co. which failed a few months ago, has brot suit against 16 companies in the endeavor to obtain the approximate amount of \$35,000 which he alleges was paid to them by A. H. Poehler.

The Continental Grain Co. recently incorporated for \$150,000; incorporators: H. A. Murphy, pres., B. J. Dodge, vice-pres., and A. B. Marcy, sec'y-treas., formerly with the McCaull-Dinsmore Co. The new company will be located in the Flour Exchange.

Carl Hawkins bookkeeper of the Quinn-Shepherdson Co. has been arrested, the charge being forgery. Hawkins is alleged to have made out checks to fictitious names, endorsed and cashed them himself. This proceeding has gone on for several months and the loss is estimated at \$3,000.

The Pillsbury Flour Mills Co. has bot the property of the Atchison Flour Mills Corp. of Atchison, Kan., for \$150,000. The property consists of a mill with a capacity of 1,200 bbls. and the Washer Elvtr. The Pillsbury Co. is now planning to enlarge the mill to a capacity of 2,500 bbls. and to erect storage bins having a capacity of 500,000 bus. It plans to make an output of 6,000 bbls. of flour daily.

MISSOURI

Clinton, Mo.—Lee Pinkston recently succeeded J. M. Smith in the Farmers Elvtr. & Supply Co.

LaGrange, Mo.—Floods in this vicinity have hindered the business of the LaGrange Elvtr. Co.

Gower, Mo.—K. E. Puckett will be in charge of the elvtr. of the Gower Grain & Coal Co. this summer.

Walker, Mo.—The Farmers Commission Co. has been incorporated for \$6,000; to buy and sell hay and grain.

Archie, Mo.—The Farmers Elvtr. & Supply Co. has closed up because of lack of business.—A. A. Marshall & Son.

East Prairie, Mo.—Additions to the plant of the East Prairie Mlg. Co. are being erected, and new machinery is being installed.

Gerald, Mo.—The Gerald Roller Mills & Elvtr. Co. is contemplating the erection of a 36x36-foot concrete warehouse to be used for the storage of feed and flour.

Cameron, Mo.—C. R. Cline, owner of the Cameron Roller Mills which burned recently states he intends to build a corn mill on the same site, with oil engine power.

St. Joseph, Mo.—The Fuller Grain Co. of Kansas City opened an office in the Corby Forsee Bldg., May 1, and will do a general grain business. B. H. Henley, formerly of Barnes-Piazek and the Missouri-Kansas Grain Co., is mgr.

Montrose, Mo.—We contemplate changing our elvtr. power here from gas to electric motor and are considering purchasing two second-hand motors about 30 h. p., 60 cycle, three phase.—Mann Grain Co., F. L. Cook, sec'y-treas., Clinton, Mo.

Deepwater, Mo.—We contemplate changing our elvtr. power here from gas to electric motor and are considering purchasing two second-hand motors about 30 h. p., 60 cycle, three phase.—Mann Grain Co., F. L. Cook, sec'y-treas., Clinton, Mo.

Jefferson City, Mo.—A series of grain grading schools will be held in this state during May, under the supervision of the State Board of Agriculture, and to be conducted by W. M. Cuning, formerly a federal grain supervisor. All persons interested in the handling of grain are invited to take advantage of the schools.

KANSAS CITY LETTER.

The Kansas City Southern R. R. will build 500,000 bus. additional storage to its elvtr.

E. M. Kauth of the Norris Grain Co. recently withdrew his application for membership in the Board of Trade.

E. Lowitz & Co. of Chicago have taken a private wire at this place. This company is represented by E. Lathrop.

John F. Schlafly, a broker, was recently elected trustee of the Temtor Corn & Food Products Co., which is liquidating.

Lamson Bros. & Co., of Chicago, have closed their Kansas City office. W. H. Burns, mgr., has gone with Dilts & Morgan as a pit broker.

The Nye & Jenks Co., successors of the Barnes-Piazek Co., recently moved from the New England Bldg. to the New York Life Bldg.

A. J. Bulte, who was drowned in an airplane accident in Florida on Mar. 22, has been succeeded as sales mgr. of the Larabee Flour Mills Corp. by J. L. Walker.

H. F. Hall, pres., of the Hall-Baker Grain Co., and his wife have left for a two months' trip abroad. They plan to spend most of the time in France and England.

The finance com'te of the Board of Trade has decided that the rate of interest on advances on cash grain consigned here be 6%. The former rate, 7%, has been in effect about a year.

Twenty-five memberships at \$1,000 each were purchased and cancelled in the Merchants' Exchange during the year, and on Feb. 1 the exchange had 820 members, against 840 of the year before.

H. C. Rice, formerly in the wholesale grain business at Wichita, has signed up with the S. H. Miller Grain Co. as representative on the road in Kansas.—Lebanon Mill & Elvtr. Co., C. M. Isom, sec'y-treas., Lebanon, Kan.

At a meeting of the Kansas City Grain Club, held Apr. 27, Pres. Fred W. Lake was authorized to appoint a com'te to organize a grain credit buro. In discussion of the "to-arrive" rule, a number of members recommended its abolition.

The supreme court of Missouri has overruled the effort of James T. Bradshaw, who was formerly state grain and warehouse commissioner, to reopen the suit to have his successor, Thomas J. Hedrick, removed from the office. Governor Arthur M. Hyde had Bradshaw ousted from that position last fall.

H. A. Merrill of the Ft. Worth office of J. Rosenbaum Grain Co. has bot a membership in the Board of Trade on a transfer from E. W. Wagner of Chicago. The membership sold for \$12,000, including transfer fee of \$500. He will be assistant mgr. of the Terminal Elvtr. under N. F. Noland.

The rule that any member, firm or corporation accepting orders from a non-member corporation shall obtain in advance a written authorization from the corporation to the effect that the mgr. or officer of the corporation giving the order is authorized to buy or sell such commodities for future delivery was adopted May 2 by vote of the members.

The amendment to Board of Trade rules recently adopted making it necessary to secure written consent before future trades can be accepted from managers of co-operative and farmer grain companies will become effective June 1. The exchange attorney is preparing a resolution conforming to the requirements and also a letter to be signed by members and addressed to their correspondents.

ST. LOUIS LETTER.

St. Louis, Mo.—Mail addressed to the Overland Grain Co. is returned "Not Found." This company, whose offices are at Nashville, Tenn., was recently reported incorporated for \$50,000.

St. Louis, Mo.—John Wright, a retired grain dealer, died a short time ago after an attack of asthma. Mr. Wright, who was 69 years of age when he died, retired from business about seven years ago, but during the war, he was connected with the United States Grain Corporation in an executive capacity.

MONTANA

Acton, Mont.—The State Elvtr. is putting in a new scale foundation.

Archer, Mont.—O. E. Whitemarsh is contemplating buying an elvtr. here.

Square Butte, Mont.—C. D. Dudley is now in charge of the McLean Elvtr. Co., succeeding Dan Corcoran in this capacity.

Forest Grove, Mont.—The McLean Elvtr. of Minneapolis recently bot the elvtr. of the Equity Co-op. Ass'n, and L. H. McLean sec'y will be in charge.

Dillon, Mont.—The Montana Mercantile Co. will erect a 50,000-bu. elvtr. and warehouse here, expected to be completed in time for this year's grain crop.

Belt, Mont.—We will not double the capacity of our elvtr., as reported, only the feed warehouse, and will do this with our own repair crew.—Rocky Mountain Elvtr. Co., J. G. Brady.

Great Falls, Mont.—R. L. Watkins has accepted a position with the Royal Mlg. Co. in the auditing department. He is a son of J. Watkins, sec'y of the Northwest Grain Dealers Ass'n.

Terry, Mont.—The elvtr. here was burned recently destroying 3,000 bus. of wheat. The elvtr. is owned by the Columbia Elvtr. Co. of Minneapolis, Minn. Plans for rebuilding are being made. I. J. Ferguson is mgr. of the Terry plant.

Helena, Mont.—Representatives of milling and grain dealing concerns and farmers' organizations met May 1 with Chester C. Davis, commissioner of agriculture, and John M. Davis, chief of the division of grain standards and marketing, in an informal conference relative to state grain handling regulations for the fiscal year commencing June 30. The grain men contended for an increase in the warehousing charges on the grounds that the charges now in existence are lower than the services entitles. The farmer representatives took a stand in opposition to the demands of the grain dealers. No action resulted and the question will be under consideration by the state department. Other matters relating to the marketing regulations were discussed. The milling and elevator interests were represented by J. W. Sherwood, W. G. Kirkpatrick, W. T. Greeley and J. W. Watkins, all of Great Falls; August Schwachheim of Cascade; C. R. McClave and J. R. Swift of Lewiston; J. H. McLean of Becket; Ralph Denio of Sheridan, Wyo., and C. D. Junkin of Minneapolis.

NEBRASKA

Auburn, Neb.—The Farmers Union may make some repairs on the elvtr.—J. C. Bonfield.

Belvidere, Neb.—The office and elvtr. of the Farmers Elvtr. Ass'n have been improved.

Gresham, Neb.—John Bickley has succeeded P. Christensen as mgr. of the Gresham Grain Co.

Nora, Neb.—The work of construction has been commenced on the new Farmers Union Elvtr.

Superior, Neb.—The Superior Mlg. Co. is installing a steam boiler to heat its mill.—D. R. Andrews.

Magnet, Neb.—Frank Ferris of Wausa, Neb. recently became mgr. of the Farmers Co-op. Union here.

Grant, Neb.—We will give our plant here a general overhauling.—O. M. Kellogg Grain Co., Denver, Col.

Clatonia, Neb.—Former Mgr. Davis of the Farmers Elvtr. here has been succeeded by Ed. and George Krauter.

Ravenna, Neb.—In addition to other improvements reported, the Ravenna Mills has erected a small addition to the feed warehouse.

Beatrice, Neb.—A quantity of grain was stolen from the elvtr. of the Beatrice Farmers Union Co-op. Ass'n recently.

Albion, Neb.—We are planning on painting all buildings this summer.—Albion Elvtr. Co., Herman Hanneman, mgr.

Creston, Neb.—The lumber sheds and yards of the Farmers Elvtr. Ass'n have undergone a general repairing this spring.

Tilden, Neb.—J. G. Nygren of Bushnell is now our mgr. He took charge April 15.—Farmers Union Exchange.—Mr. Nygren succeeds Max Giehler.

Adams, Neb.—The elvtr. formerly operated by the Central Granaries is now operated by Nye-Schneider-Jenks Co. of Omaha.—H. M. Miller.

Minatare, Neb.—L. P. Luper, former mgr. of the Central Granaries which was taken over by the Nye-Schneider-Jenks Co. a few months ago, has bot the plant.

Kimball, Neb.—We intend to remodel our elvtr., put in a new leg and motor and may change dumps.—Farmers Union Co-op. Ass'n Geo. A. Ernst, mgr.

Bancroft, Neb.—B. F. Graham, who has been mgr. of the Farmers Grain Co. here for several years, recently resigned his position to be succeeded by E. Farley.

Riverdale, Neb.—John and George West, stockholders in the Farmers Co-op. Elvtr. Co. are endeavoring to obtain rescission of their subscriptions, alleging that the company was paying dividends with borrowed money.

Scotia, Neb.—The Scotia Grain & Supply Co. recently incorporated for \$50,000. Incorporators: M. Mikkelsen, W. H. Beck, Louis Bremer, George Hoke, O. H. Luse, O. C. Reams, Louis Weger, A. E. Schilling and Henry Sautter.

Stuart, Neb.—We are doing general repairs; a little painting, waterproofing a pit and overhauling machinery will about cover all we will do this summer. May possibly rebuild, but have about concluded to defer this until next year.—Wm. Krotter Co.

Davenport, Neb.—We are beginning work on a 16,000-bu. elvtr. to replace the one destroyed by fire some time ago. It will be of steel construction, iron clad with cement bottom and asbestos roof and will be electrically driven. P. A. Peterson has resigned his position as chief engineer of the Nye, Schneider Jenks Co. effective May 1, which position he has filled for a number of years.—F. O. Bates, agt. for Nye, Schneider Jenks Co.

OMAHA LETTER.

Omaha, Neb.—The Trans-Mississippi Grain Co. contemplates adding 500,000 bus. storage to its elvtr.

W. J. Hynes, head of the Hynes Elvtr. Co. and the Farmers Terminal Elvtr., is being sued for divorce, Mrs. Hynes' charge being cruelty, "causing mental distress."

The elvtr. on the C. & N.-W. Ry. at Council Bluffs, Ia., known as the Iowa Elvtr., formerly operated by the Adams-Reitz Grain Co., has been purchased by the Scoular-Bishop Grain Co., and will be managed by Fred Swett. Adams-Reitz retire from the grain business.

Omaha, Nebr.—The Grain Club of Omaha was organized Apr. 18, and the following officers were elected: S. S. Carlisle, pres., W. J. Hynes and J. W. Holmquist, vice-presidents, Frank Manchester, sec'y, E. C. Twamley and A. H. Bewsher, directors for three years; C. L. Bostwick and Barton Miller, two years; E. A. Cape and John Kuhn, one year. Members of the Grain Exchange in good standing and non-members connected in the grain trade, but not to exceed the number of 50, are eligible to membership in the club.

NEW ENGLAND

Attleboro, Mass.—Mail addressed to E. A. Briggs & Co. is returned marked "Out of Business."

Adams, Mass.—Creditors' claims amounting to \$25,141 forced the Hoosac Valley Coal & Grain Co. into bankruptcy recently.

Portland, Me.—Directors of the Port of Portland will receive sealed bids for the furnishing and installing of a grain handling system at their office on May 19, until 2 p. m.

Danversport (Danvers p. o.), Mass.—Sparks from a passing locomotive are believed to have set fire to the roof of the grain shed of the Geo. H. Parker Co., recently, causing a loss of about \$100.

Boston, Mass.—At a recent convention of the wholesale grocers of New England, it was stated by Mayor Curley that grain dealers in the Central West are willing to erect a 3,000,000-bu elvtr. if necessary co-operation can be secured from this section.

Fall River, Mass.—Fire originating in the unoccupied grain elvtr. of Griffin Bros. endangered several buildings nearby until it was gotten under control. The loss is estimated at several hundred dollars.

Boston, Mass.—Stockholders of the American Malt & Grain Co. can obtain their third liquidation dividend, amounting to \$12, on or after May 10, by presenting their certificates of stock at the Guaranty Trust Co., New York.

Barre, Vt.—The Grand Isle Feed & Produce Co. Inc. recently incorporated for \$1,000. Incorporators: M. H. Vantine, E. J. Parker, M. O. Kinney and William Martin. The new concern will do a wholesale and retail business in flour, grain, feeds, groceries, coal fertilizers, lime, cement, tile, salt, binder twine, farm machinery and farm produce.

Boston, Mass.—The nominating com'tee of the Chamber of Commerce has nominated the following ten men for election to the Board of Directors: W. I. Bullard, Charles M. Cox, E. F. Cullen, George Ellis, Frank Purington, Francis Tully, Edward Woods, three year term; Frank Eshleman, two years; Henry Bradlee and Oliver Fisher, one year. Election occurs on May 16.

NEW JERSEY

Roselle Park, N. J.—Fire causing an explosion of grain dust destroyed the elvtr. of Chas. S. Pountney, incurring a loss estimated at \$75,000 on Apr. 27. Other buildings were burned and trains were held up for an hour and a half.

Spotswood, N. J.—The elvtr. of the Spotswood Grain Co., burned Mar. 28, as stated in this column last number, was situated at this place, not Perth Amboy. James P. Carey of the Spotswood Co. writes they have not decided to rebuild as yet.

NEW MEXICO

Melrose, N. M.—The Morris Grain Co. whose elvtr. burned recently, expects to build a new plant soon.—Robert Stone Grain Co. successor to Lester Stone & Co., Clovis, N. M.

Clovis, N. M.—We have just purchased the elvtr. and warehouse of Lane & Sons Grain Co. and will continue to operate our business as the Robert Stone Grain Co. Previous to this time we have had only an office here, buying only in carlots from dealers.—Robert Stone Grain Co., successor to Lester Stone & Co.

NEW YORK

BUFFALO LETTER.

The Co-op. Grange League Federation will hereafter be located in the Chamber of Commerce Bldg.

A. M. Hazard, formerly connected with his brother-in-law, Frank Fisk, in the grain business, died Apr. 23 at Nice, France. His father, George Hazard, was also active in the grain business.

Buffalo, N. Y.—The Superior Elvtr. Co. has erected a one-story concrete building which will be used as a welfare house for the employees. It consists of a dining hall and kitchen, shower baths and locker rooms and a rest room.

NEW YORK LETTER.

New York, N. Y.—J. R. Johnson, who recently became connected with Pritchard & Co., is representing that company on the Produce Exchange.

The following nominations for officers in the Produce Exchange have been presented by the nominating committee: George Rossen, pres.; P. H. Holt, vice-pres.; E. R. Carhart, treas.; mgrs. for two years, R. L. Sweet, Watson Moore, P. S. Arthur, Franklin Ryan, Henry Leverich and T. S. Young; and Alfred Romer, trustee of Gratuity Fund for three years.

NORTH DAKOTA

Wales, N. D.—Mail addressed to the Monarch Elvtr. Co. is returned marked "Closed."

Sanborn, N. D.—The Andrews Grain Co. is planning to enlarge and remodel its plant here.

Lisbon, N. D.—The flour mill of the Dakota Mfg. Co. was burned recently. The office and grain tank were saved.

Newville, N. D.—The elvtr. of the Newville Elvtr. Co. was burned recently, including machinery and 10,000 bus. of grain. Fair insurance on all. Cannot tell about rebuilding.—Newville Elvtr. Co.

McClusky, N. D.—The Farmers Elvtr. Co. of which E. Anderson is mgr. will erect an elvtr. to take the place of the one that was burned.

Donnybrook, N. D.—The Atwood-Larson Elvtr. Co., which recently bot the elvtr. of the Farmers Elvtr. Co., has no agent here at present.

Cando, N. D.—We are building a new coal shed with seven bins here, and will repair our elvtr.—Monarch Elvtr. Co., M. F. Birdseye, general supt., Minneapolis, Minn.

St. Thomas, N. D.—We recently purchased the Occident Elvtr. Co.'s elvtr. and flour house here and will do some remodeling to the plant soon. Matt Buchanan will be our agent when the plant is ready for business.—Monarch Elvtr. Co., M. F. Birdseye, general supt., Minneapolis, Minn.

OHIO

Fayette, O.—A. Aungst & Co. recently bot the plant of the Farmers Co-op. Co.

Columbus, O.—Mail addressed to the Williams Mlg. Co. is returned marked "Out of business."

Rudolph, O.—We are repairing our roof and will cover it with waterproofing.—Liberty Grain Co.

Columbus, O.—L. W. Stevenson recently became connected with the Smith-Sayles Grain Co.

Huron, O.—DeLacy Mathews is the new mgr. of the Avery Elvtr. & Grain Co. succeeding Philip Loscher who resigned a short time ago.

Washington C. H. O.—We are not in the elvtr. business and have not taken over the S. W. Cissna & Sons elvtr. as reported.—Fayette Farm Bureau.

New Pittsburg, O.—The new elvtr. that we are building here will be run in connection with the A. G. Smith Mlg. Co. of Wooster, O.—A. G. Smith Mlg. Co.

The 43d annual meeting of the Ohio Grain Dealers Ass'n will be held at Cedar Point, Ohio, on Lake Erie, Wednesday and Thursday, June 21 and 22.—J. W. McCord, sec'y, Columbus.

Eaton, O.—The new elvtr. of the Eaton Farmers Equity Co. will have a capacity of 15,000 bus. and will be constructed of wood and cement. A seed house, 26x100 feet, will also be erected.

Burbank, O.—The name of H. Fike's successor as mgr. is Aaron Mutersbaugh.—Burbank Equity Exchange.—It was formerly reported that Will Howman and R. C. Yost were Mr. Fike's successors.

Thackery, O.—We will begin the middle of this month to build a new office in connection with flour and feed rooms and scale shed. We are installing a new 10-ton scale.—Niswonger & Billhimer.

Toledo, O.—The first annual meeting of the Ohio Co-op. Mgrs.' Club was held May 9 at the Toledo Commerce Club, ending with a banquet at which the attendants were the guests of the Toledo Produce Exchange.

Blanchester, O.—We are just completing coal handling and storage plant consisting of six concrete stave bins, 14 feet inside diameter and 40 feet high with framework to support 1 beam (mono-rail) for conveyor bucket and roof for bins. Also concrete pit under R. R. track and gates and chutes for delivering coal to wagons or trucks by gravity—eliminates all shoveling.—The Dewey Bros. Co.

Whiteville (Metamora p. o.) O.—E. H. Baker recently exchanged the Whiteville Elvtr. of which he has been proprietor since fall, for a home in the residential section of Toledo; J. A. Bohannon will operate the elvtr. after May 1. Mr. Baker acquired the elvtr. from Harvey Burch when it was in a very bad shape and has succeeded in making a thriving concern out of what he states is his first venture in the elvtr. field. He will return to his home at Huntington, Ind., until he decides future plans.

CINCINNATI LETTER.

The A. C. Gale Grain Co. has moved to new quarters in the St. Paul Bldg.

August Feger of Feger Bros., is recovering nicely from a recent operation for appendicitis.

Thomas M. Dugan of T. M. Dugan & Co. was suspended from the Grain and Hay Exchange on April 18 until July 1 on charges of unmercantile conduct.

R. L. Early was recently promoted to the position of mgr. of the hay dept. of the Early & Daniel Co. Up to this time he has been assisting E. B. Terrill, general mgr. Lyle Lord was made mgr. of the extensive feed manufacturing and selling; Ellis Early supervisor of the elvtr. end of the business.

OKLAHOMA

Blackwell, Okla.—The Blackwell Mill & Elvtr. Co.'s plant was damaged by a tornado.

Minco, Okla.—The El Reno Mill & Elvtr. Co. of El Reno is remodeling its elvtr. at this place.

Strong City, Okla.—We are moving our elvtr. at this place to Hammon, Okla.—Clinton Mfg. Co.

Lovell, Okla.—We have entirely rebuilt our elvtr. here.—W. M. Randels Grain Co., Enid, Okla.

Hopeton, Okla.—We have entirely rebuilt our elvtr. here.—W. M. Randels Grain Co., Enid, Okla.

Muskogee, Okla.—The Adkins Hay & Feed Co. has increased its capital stock from \$75,000 to \$200,000.

Kingfisher, Okla.—The Oklahoma Mill Co.'s plant was one of the several mills that were damaged by recent tornadoes.

Byron, Okla.—We are putting in a new Richardson Automatic Scale this spring and perhaps some more storage rooms.—Byron Grain Co.

Union City, Okla.—The interior of the pits of the elvtr. here owned by the El Reno Mill & Elvtr. Co. is being rebuilt with tar and cement.

Carmen, Okla.—McCradly Bros. of Lambert have bot the elvtr. of the Carmen Grain & Supply Co., and Tilman Bales has been appointed mgr.

Oklmulgee, Okla.—I will only do a jobbing business along feed lines hereafter.—J. L. Carey.—Mr. Carey's elvtr. was burned last year and was not rebuilt.

Alva, Okla.—The concrete elvtr. of the Alva Roller Mills is nearing completion. It will have a capacity of 72,000 bus. and is being erected at a cost of \$50,000.

Elk City, Okla.—We are building two steel grain bins that will hold about 12,000 bus. each thereby increasing our grain storage to 150,000 bus.—American Mfg. Co.

Dover, Okla.—The Dover Loyal Farmers Elvtr. Co. will erect an elvtr. having the capacity of 15,000 bus. and which will cost \$6,500, to replace the old elvtr. which is being destroyed.

Gage, Okla.—We are rebuilding our ice plant but not the mill or elvtr. at this time.—Gage Mfg. & Mfg. Co.—This company's plant, including ice plant, mill and elvtr. was burned recently.

El Reno, Okla.—The El Reno Mill & Elvtr. Co. of which John O'Brien is mgr., is remodeling the elvtr. at Minco and rebuilding the interior of the pits of the elvtr. at Union City with tar and cement.

Hinton, Okla.—Work has been started on the new elvtr. of the Zobisch Grain Co. to replace the one that was burned last year. It is expected to be completed in time to handle the grain crop of this year.

Hammon, Okla.—The elvtr. we are moving from Strong City to this place, will be open by July 1; and we will do a general grain, coal, flour and feed business there.—Clinton Mfg. Co., P. G. Newkirk, mgr. Clinton, Okla.

Muskogee, Okla.—DeWitt Waldo recently succeeded his father, H. Waldo, in the latter's grain business here. The older man will discontinue association in the grain business and will be located at his farm near Welling.

Ponca City, Okla.—The Wheat Growers' Ass'n which recently purchased the elvtr. of the J. S. Hutchins Grain & Elvtr. Co. has elected Henry Coats, pres., Frank Caldwell, sec'y and Perry Lynch, treas. Earl Souigny will be in charge of the elvtr.

Nardin, Okla.—We have purchased the elvtr. owned by the Blackwell Mill & Elvtr. Co., consideration \$8,000. Directors: W. B. House, pres., L. H. Norton, vice-pres., F. H. Koelling, sec'y-treas., Wm. Hausy, L. D. Sawyer, C. W. Reese, G. Shoemaker and Louis Droselmeyer, mgr. Capacity, 10,000 bus., equipped with automatic scales, truck air dumps, wagon scales, flour house. We will take possession about June 1.—F. H. Koelling, sec'y-treas.

Capron, Okla.—We have purchased the site of the elvtr. of the Farmers Co-op. Ass'n that burned last year and will build a 10,000-bu. elvtr. on it—frame building with iron sides and composition roof.—Southwestern Elvtr. & Merc. Co., C. W. Lewis, mgr., Hardtner, Kan.

Thomas, Okla.—The Farmers Grain & Supply Co. will build a 15,000-bu. studded iron clad elvtr. The equipment will include 25 h.p. motor, Richardson Automatic Scale, 10-ton wagon scale, 1,500-bu. non-chokable leg and an auto truck dump. The Star Engineering Co. has the contract.

OKLAHOMA CITY LETTER.

Tornadoes in this part of the country the early part of April were detrimental to several mills including that of the Plansifter Mfg. Co.

A. S. Connelley, pres. of the Plansifter Mfg. Co., died Apr. 23 from blood poisoning which was the result of a recent fall. He was 65 years old.

The W. H. Coyle Co., to conduct a grain, feed, flour, hay and cotton business here and at Guthrie, has been incorporated for \$100,000. Incorporators: W. H. and M. Coyle of Guthrie and J. W. Coyle of Oklahoma City.

Paul Jackson and C. W. Friss recently organized the Jackson-Friss Co. Both were with the Marshall Grain Co. and at one time, Mr. Jackson was with the Perkins Grain Co. Mr. Friss had charge of the business of the Marshall Brokerage Co. of Memphis, Tenn.

The Pittman Grain Co., Yukon Mill & Grain Co. and E. C. Kolp of Yukon, and P. L. Jacobson, new vice-pres. of the Plansifter Mfg. Co. of Oklahoma City, have withdrawn from the Grain Exchange; and the Linton-Christy Co. of Wichita has sold its membership to Dewey Hunter and C. H. Cox of Enid has sold his to Dilts & Morgan. The membership now totals 35.

C. B. Cozart has been elected to serve the remainder of the term as pres. of the Grain Exchange, which position was recently vacated by Garland White, who also resigns as a director. George Williams and George Curtis have resigned as directors of the Exchange and the three vacancies have been filled by George Grogan, W. B. Stowers and S. A. Marshall. R. C. Shelton has been elected sec'y of the Exchange to succeed C. V. Topping, who was formerly secretary of the Oklahoma Millers Ass'n. Mr. Topping is said to have located in Kansas City.

OREGON

Pilot Rock, Ore.—The warehouses of the Pacific Elvtr. Co. and the H. W. Collins Co. were recently burned. Loss, several thousand dollars. Indications show that the buildings were deliberately set afire.

Portland, Ore.—Mail addressed to J. W. Carr, who was reported as having opened a grain brokerage business here a short time ago, is returned "unclaimed." Mr. Carr was formerly mgr. of the Great Falls, Mont., office of the McCaull-Dinsmore Co.

Portland, Ore.—The Portland Grain Co. recently organized and incorporated for \$25,000. J. F. O'Bryant is pres. and mgr. and Blaine Hallock is vice-pres. Both men are of Baker, where Mr. O'Bryant recently disposed of his business interests that he might locate here.

PENNSYLVANIA

Philadelphia, Pa.—S. T. Yost of Myerstown has applied for membership in the Commercial Exchange.

Philadelphia, Pa.—The firm of Bald & Caldwell has been suggested for membership in the Commercial Exchange by Thomas Sharpless and L. G. West.

Uniontown, Pa.—The F. C. Pew Co. has been expelled from the Nat'l Ass'n for refusing to arbitrate a trade difference with E. T. Custenbolder & Co., of Sidney, O.

Lancaster, Pa.—Ross Eby of the Levan & Boyd Co. died recently at the age of 48 years. Mr. Eby was connected with the firm of Jonas F. Eby & Son which was taken over by Levan & Boyd when the head of the firm died.

Uniontown, Pa.—This company has been formed by residents of Uniontown, capital stock, \$50,000, and has only been in business since April 1. The writer was formerly connected with Herb Bros. & Martin in Pittsburgh. This firm has retired.—Ren Martin, mgr. Union Hay & Grain Co.

Philadelphia, Pa.—The Board of Directors of the Pennsylvania Railroad System have decided that the sum of \$165,000 may be expended on grain floating equipment for this city, which will consist of a floating grain elvtr. with a delivering capacity of 12,000 to 15,000 bus. per hour and three barges having a capacity of about 40,000 to 50,000 bus.

Canton, Pa.—Officials of the Pennsylvania Railroad have announced that work will be started on the elvtr. here to be completed in time for this year's grain crop. Additional bins having a capacity of 1,300,000 bus. will be erected, making the total capacity 4,250,000 bus. Facilities for loading four ships at one time at a rate of 120,000 bus. per hour will be had.

SOUTH DAKOTA

Hammer, S. D.—The F. M. Davies Co. will erect a grain elvtr. here.

Davis, S. D.—A driveway to the plant of the Farmers Elvtr. Co. has been erected.

Parker, S. D.—We have just shingled our office.—Farmers Union Elvtr. Co., Jas. Elder, Jr., mgr.

Scotland, S. D.—We will rebuild the leg of our elvtr. here and make some needed repairs.—F. L. Wheeler.

Parker, S. D.—A grain elvtr. will be erected here which will be conducted by four Parker business men.

Ferney, S. D.—The Atlas Elvtr. Co. will have its coal sheds rebuilt. The T. E. Ibberson Co. will do the work.

Winner, S. D.—The Rosebud Grain Co. recently equipped its elvtr. with two Hall Signaling Grain Distributors.

Astoria, S. D.—Geo. P. Sexauer & Son intend to install a new cup belt, also auto truck dump scales.—C. A. Chester, mgr.

Sioux Falls, S. D.—E. E. Mills, pres. of the Mills Grain & Supply Co., recently bot the business of E. Kelley & Sons Produce Co.

South Shore, S. D.—The Farmers Co-op. Elvtr. Co., was burned recently incurring a loss of \$10,000 which is partly covered by insurance.

Sioux Falls, S. D.—E. P. Tawney, well known grain man of this place, has established a branch office of the Burke Grain Co. at Sioux City.

Estelline, S. D.—A. C. Ruddy, former mgr. of the Farmers Co-op. Co. shot and killed himself recently. He has been succeeded by K. G. Fader.

Lincoln, S. D.—Assessment of independent and farmers elvtr. companies under the provisions applying to grain brokers, if they were doing a grain brokerage business, was advocated recently by W. H. Osborne, state tax commissioner.

SOUTHEAST

Augusta, Ga.—W. H. Nixon is promoting the construction of a grain elvtr.

Mobile, Ala.—W. H. Binkley recently became official grain inspector of this city. He is employed by the local Chamber of Commerce.

Norfolk, Va.—The contract for the municipal terminal grain elvtr. was let May 2 to A. M. Crain & Co. at \$639,000. The elvtr. will consist of a working house of 250,000 bus., storage annex of 500,000 bus. and an eight-pit receiving track shed. The workinghouse will have two receiving legs and three shipping legs, each having an elevating capacity of 25,000 bus. an hour; two cleaning legs; screenings leg, and space for an additional drier and marine leg. The receiving track shed will be arranged for four tracks with eight unloading pits and traveling shovels, and pneumatic door openers. The layout will provide for the future installation of car dumpers. All of the conveyors are 48 inches wide and carry 25,000 bus. an hour. The elvtr. is designed for the addition of a drier, marine tower and extensive conveyor gallery system, all of which will be constructed when business requires. For the present the grain will be spouted to ships lying directly in front of the elvtr. The grain elvtr. is part of the new municipal terminals, which involve the construction of three large piers, two story concrete warehouses and pier sheds and several miles of marginal wharves and slips. The municipal terminal project was designed by the Folwell-Ahlskog Co., who will also supervise the construction.

Tupelo, Miss.—Mail addressed to K. C. Hall is returned marked "Unclaimed." Mr. Hall's concern was established here only a short time ago operating as receivers and distributors of grain.

TENNESSEE

Nashville, Tenn.—The Southland Mill & Elevtr. Co. recently incorporated with a capital stock of \$50,000. Incorporators: R. A. McWhirter, Stutson Smith, W. L. Liggett, John Ralls and C. L. Liggett. The latter recently bid again in the property of the J. A. and O. L. Jones Mill & Elevtr. Co.

Memphis, Tenn.—A vote was taken on May 5 at a general meeting of the Merchants Exchange on an amendment to the rule regarding transference of membership whereby when a membership is to be sold, the sec'y must be notified so that a notice of the sale may be posted. Before a transfer can be made, the purchaser must notify the sec'y the price he has paid and from whom the purchase was made so that this information can be posted for 10 days. A transfer fee of \$10 was recommended and no member is allowed to hold more than five certificates, but he may vote on each.

TEXAS

McKinney, Tex.—The Browne Grain Co. and the Gunter Grain Co. are out of business.

San Antonio, Tex.—The elevtr. being erected for C. H. Guenther & Sons by the Burrell Eng. & Construction Co. is under roof.

Dallas, Tex.—R. W. Blair, mgr. of the Blair Grain Co., has announced plans for the erection of a brick business block at Lubbock.

Lamont, Tex.—The Lamont Wheat Growers recently incorporated for \$15,000. Incorporators: J. S. Gilbert, S. D. Dorsett and S. M. Dowell.

Waxahachie, Tex.—D. H. Thompson Grain Co. suffered a loss estimated at \$10,000 in the recent fire at this place, which also damaged the plant of the Stone-McKenna Mfg. Co.

Amarillo, Tex.—We do not contemplate any new building or improvements with the exception of our general spring improvement.—Early Grain & Elevtr. Co., per H. L. Kearns, sec'y-treas.

Canadian, Tex.—We are contemplating the building of an elevtr. here, about 15,000 to 20,000 bus. capacity, equipped with Hall Special Leg, truck dumps, hopper scale and auto truck scale.—Liske Grain Co.

Plainview, Tex.—The Ayers-DeLeach Grain Co. recently incorporated for \$50,000. Incorporators: R. C. Ayers, A. B. DeLeach and E. L. Mills. The company is contemplating enlarging its milling plant and will make a specialty of a poultry feed.

Celina, Tex.—B. F. Smith recently bot the property of the Celina Mill & Elevtr. Co. and is planning to overhaul it. He is also contemplating the erection of a 125-bbl. flour mill to cost \$50,000, and to establish small elevtrs. at towns in this vicinity.

Fort Worth, Tex.—Every Texas grain dealer is expected to attend the annual meeting of the Texas Grain Dealers Ass'n here May 26-27 to help to celebrate the silver anniversary of the organization which has done more than all others to promote their business interests.

Ft. Worth, Tex.—The officers and directors of the Ft. Worth Grain Exchange were all re-elected at the annual election April 18. They are: R. I. Merrill, pres., Charles Little, vice-pres., E. B. Wooten, sec'y., and R. K. Whitty, treas. Directors: R. I. Merrill, J. A. Simons, Jr., G. E. Cranz, K. U. Chadwick, Charles Little and R. C. Underwood.

Wichita Falls, Tex.—The new headhouse of the elevtr. owned by the J. C. Hunt Grain Co. and operated by the J. C. Mytinger Grain Co. will contain three legs and will be equipped with two 2,000-bu. hopper scales, two receiving sinks, a Carter-Meyhew Oat Cleaner, an Invincible Clipper and an Invincible Scourer, a wagon dump, car puller and power shovels. The total capacity will be about 350,000 bus.

WASHINGTON

Colfax, Wash.—Mail addressed to the Colfax Mfg. Co. is returned marked "Unclaimed."

Seattle, Wash.—Mail addressed to the Harper Hay & Grain Co., a newly incorporated firm, is returned "Unclaimed."

Winona, Wash.—The 80,000-bus. elevtr., warehouse and flour mill of the Superior Mfg. Co. was burned Apr. 27 at a loss of about \$150,000, which is only partially covered by insurance.

Walla Walla, Wash.—B. F. Owsley of Owsley & Case, grain merchants, has been charged with having sold two lots of grain valued at \$2,400 when he knew it was stolen grain. One lot is said to have been stolen from the Hadley Warehouse Co. and the other from the warehouse of the Northwestern Dock & Elevtr. Co. of Portland. A temporary order has been issued restraining Owsley from transferring stock to anyone but the plaintiff. At the same time Fay Broughton was charged with the theft of 1,700 sacks of wheat, valued at \$4,000, which belonged to Dan Donovan.

WISCONSIN

Fredonia, Wis.—E. P. Neuens is making some improvements on his elevtr.

Loyal, Wis.—We took this elevtr. over from A. C. A.—Jos. Zenz, sec'y Loyal Elevtr. Co.

Strum, Wis.—The Strum Co-op. Elevtr. Co. is the new name of Strum Farmers Elevtr. Co.

Milton Junction, Wis.—The elevtr. here has been bot by the Ladish-Stoppenbach Co. and has been put in operation.

Richland, Wis.—The Snyder & Berry Co. recently incorporated for \$10,000 to buy and sell hay, grain, food and live stock. Incorporators: E. R. and G. H. Snyder and H. T. Berry.

Ladysmith, Wis.—The Ladysmith Trading Co., recently incorporated for \$15,000, bot the branch warehouse of the Northwestern Supply Co. and will continue to operate the wholesale and retail flour, feed and grain business. E. E. Carson is sec'y and treas.

MILWAUKEE LETTER.

We have discontinued operating an elevtr.—Franke Grain Co.

The finance com'tee of the Chamber of Commerce has determined the rate of interest for May at 6½%.

Directors of the Chamber of Commerce recently re-elected M. H. Ladd as chief weigher and A. A. Breed as chief inspector for the fiscal year 1922-1923.

J. W. Connor of Superior, Wis., has been made a member of the Wisconsin Grain and Warehouse Commission for three years, succeeding Edward McKinnon.

F. H. Foy has become connected with the Charles A. Krause Mfg. Co. and will be in charge of the grain buying end of the business. He was formerly with the American Malting Co.

The following members have been admitted to the Chamber of Commerce: Edgar Hughes and Curt Kannowsky, and G. C. Holstein, deceased, and E. J. Morgan's memberships have been transferred.

The Chamber of Commerce recently adopted an amendment to the rule regarding futures and hereafter the commission on futures will be ¼c bu., ½c bu. to members, and 25c per 1,000 bus. to members who do their own buying and selling but clear their trades thru other members.

A new idea has been practiced on Elevtr. "E" in the covering of the lower part of the structure with four-ply roofing paper which is made up of asphalt and asbestos, rendering it fire-proof and making it appear as though the part had been newly constructed of large blocks of stone.

We are indebted to H. A. Plumb, sec'y, for a copy of the 64th annual report of the Chamber of Commerce containing the rules of the Chamber, lists of members and statistics of the trade and commerce of the city for 1921, and the reports of the officers for the fiscal year ending Apr. 3, 1922.

Andrew Templeton has succeeded James Hessburg as mgr. of the Milwaukee interests of the Armour Grain Co. Mr. Templeton had been a member of the firm of Johnstone & Templeton, grain commissioners, for some years. He retired from business a short time ago, but has decided to resume activity.

WYOMING

Baggs, Wyo.—A new elevtr. 40x27x50 feet, having the capacity of 18,000 bus., has been erected by the Farmers Mfg. & Elevtr. Co. to replace the elevtr. and mill which was burned some time ago. The new mill is 3 stories high, 30x48 feet, and has a capacity of 60 bbls. daily and the warehouse is 72x30 feet. The structures are covered with corrugated iron and have been equipped with machinery that will be electrically driven.

Elevator Observations.

BY TRAVELER.

Gasoline Safety Cans.

Saw an elevator man pouring what he thought to be kerosene into a lantern. The odor suggested something other than kerosene to me, and I asked about it. We agreed the stuff was gasoline. He didn't light the lantern.

He said he was glad that at least one nose knows; and as a sidelight on the occurrence, he vowed he would keep no gasoline on the premises except when contained in approved safety cans. I think he was sufficiently frightened that the vow will be kept.

The Traveling Repair Man.

The hobo gas engine repairer is a graduate of the school which sent out his cousins, the nomadic typewriter tinkerer and the itinerant sewing machine surgeon.

I saw a grain dealer the other day who recently had experience with one of the gentlemen. The engine in the elevator had not been functioning properly for some days, but still it was doing its work with a little coaxing. The hobo repair man happened along when business was slack, and the elevator man thought it might be a good time to have the engine tuned up. He obtained part of his desire, that is, he saw the engine taken down and put together again; but the only music it would make thereafter was the swear words it induced in the mouth of the man who tried to start it.

The factory man who was sent for found all adjustable parts of the engine to be out of adjustment; and he was short a few pieces that were quite important. The only likely explanation of the absence of the parts was that the hobo had had them left, did not know where to put them, and played safe by dropping them in his tool kit or down some convenient hole.

The Extinguisher Salesman.

I stepped into a bright, clean, orderly office of a Michigan dealer last week with the natural expectation of a courteous reception.

Much to my surprise everyone eyed me with vigilant suspicion and watched me so closely I became uncomfortable and left. My narration of that experience to a fire insurance inspector who I met on the local the next morning stirred him to convulsions and I was further depressed.

He explained that all my discomfort was occasioned by the indiscretions of a fool who had been trying to sell fire extinguishers. This near salesman was possessed of the idea that a demonstration was necessary to convince his prospects of the worth of his goods, so he said nothing until he had emptied a bottle of gasoline on the freshly varnished floor, then getting the attention of everyone in the office the fool lighted the gasoline and proceeded to extinguish the flames with his bottle of carbon tetrachloride. He put out the fire very quickly, and also aroused the ire of the proprietor with the result that he was also put out and that too without an opportunity to tell the price of his extinguisher.

I have been looking for the fool ever since and needless to say he will get another bawling out when I meet him.

Kansas City Organizing Credit Buro.

The Grain Club of the Kansas City Board of Trade at a meeting Apr. 27 directed Pres. Fred Lake to appoint an organization com'tee of three to make arrangements for the formation of a separate corporation, to conduct the proposed grain credit buro.

Forty-eight firms pledged their support to the buro.

Later Mr. Lake named George S. Carkner, E. O. Bragg and J. E. Rahm as the organization com'tee.

Changes in Rates

As shown by tariffs recently filed with the Interstate Commerce Com'n the carriers have made the following changes in rates:

Western Trunk Lines in Sup. 20 to 1-P gives rules, regulations and exceptions to classifications, including certain applications to grain and grain products, effective May 15.

C. & E. I. in Sup. 23 to 8625-B names joint export rates on grain and grain products from stations on its lines and on the C. & I. C. Ry., to points in Ala., Fla., La., and Miss., effective May 28.

C. R. I. & P. in Sup. 15 to 19690-I names local, joint and proportional rates on grain, grain products, seeds and broom corn from stations in Colo., Kan., Mo., Neb., N. M., Okla., Council Bluffs, Ia., to Little Rock, Ark., stations in Ark., La., Mo., effective May 31.

A. T. & S. F. and associated lines in Sup. 6 to 5655-A-1 names joint proportional rates on grain, grain products and seeds from points in Mo., Kan., Okla., N. M., Tex., Superior, Neb., to Galveston, Houston, Texas City, Beaumont, Orange, Port Arthur, Tex., for export, effective May 29.

A. T. & S. F. and associated lines in Sup. 20 to 7481-G names joint rates on grain products and seeds from stations in Colo., Kan., Mo., Okla., Superior, Neb., on its lines and on G. C. & S. F. Ry. and L. & T. R. R., to points in Ala., Ark., Kan., La., Mo., Miss., Okla., Tenn., Tex., effective May 29.

C. R. I. & P. in Sup. 12 to 31408-A names local, joint and proportional rates on grain, grain products, seeds and broom corn from stations in Colo., Kan., Mo., Neb., N. M., Okla., Council Bluffs, Ia., to Memphis, Tenn., New Orleans, La., stations in Ala., Ark., La., Miss., Okla., effective May 31.

Ill. Cent. in Sup. 3 to 601-G gives local, joint and proportional rates domestic and when for export on grain, grain products, hay and seeds between stations in Iowa, Minnesota and South Dakota to Minneapolis, Chicago, Milwaukee, Omaha, Peoria, St. Louis and Ohio River crossings, effective June 1.

C. & E. I. in Sup. 3 to 625 gives joint and proportional rates on grain and grain products from its stations to points in the southeast, changing the application of proportional rates to Memphis and canceling Rule No. 40 on minimum charge for carload shipments by making Sec. 2 of the Southern Classification No. 45 applicable, effective June 1.

C. F. Ass'n in Sup. 15 to 245-A names local, joint and proportional rates on grain, grain products and by products from points in Ill., Ind., Ia., Ky., Mich., Mo., N. Y., Ohio, Pa., W. Va., Wis., to Albany, Baltimore, Boston, New York, Philadelphia, Rochester, Syracuse, Utica and other eastern U. S. points also basis for rates to U. S. and Canadian ports for export, effective May 25.

C. R. I. & P. in Sup. 26 to 28675-D names local, joint and proportional rates on grain, grain products, broom corn, alfalfa cake and meal, linseed cake and meal and seeds between Chicago, Peoria, Rock Island, Ill., Council Bluffs, Ia., Kansas City, St. Joseph, St. Louis, Mo., Minneapolis, St. Paul, Minn., Omaha, Neb., also stations in Colo., Ill., Ia., Kan., Minn., Mo., Neb., Okla., S. D., and stations in Colo., Kan., Neb., N. M., Okla., and Texhoma, Tex., effective May 28.

C. R. I. & P. in 28675-E cancels 28675-D and names local, joint and proportional rates on grain, grain products, broom corn, alfalfa cake and meal, linseed cake and meal and seeds, between Chicago, Peoria, Rock Island, Ill., Council Bluffs, Ia., Kansas City, St. Joseph, St. Louis, Mo., Minneapolis, St. Paul, Minn., Omaha, Neb., also stations in Colo., Ill., Ia., Kan., Minn., Mo., Neb., Okla., S. D., and stations in Colo., Kan., Neb., N. M., Okla., and Texhoma, Tex., effective June 1.

A. T. & S. F. and associated lines in Sup. 9 to 5702-G names local, joint and proportional rates on broom corn, castor beans, pop corn, seeds, hay and straw between points in Kan., Colo., Okla., Superior, Neb., Joplin, Mo., and Kansas City, Mo.-Kan., St. Joseph, St. Louis, Mo., Atchison, Leavenworth, Kan., Omaha, Lincoln, Neb., Sioux City, Ia., Chicago, Peoria, Ill., St. Paul, Minn., also distance rates between sta-

tions in Kan.; stations in Okla., and stations in Kan.; also Superior, Neb. and Joplin, Mo.; Superior, Joplin, and stations in Kan., effective May 29.

18,000 Bu. Concrete Elevator at Mulvane, Kan.

Three years ago the Mulvane Co-operative Union of Mulvane, Kan., purchased one of the elevators in Mulvane. The building was a studded elevator. All machinery was out of alignment, grain was ankle deep every way, every day. The fire insurance rate high. The machinery was out of date. Every day brought increased losses and the cost of operation was prohibitive.

Believing they could do better if they had a certain other elevator in Mulvane, which had warehouse and mill room adjoining, they purchased it and transferred their activities to it. The old plant was practically abandoned. They found the other place to be little better. They called in several elevator builders, and it was decided that the thing to do was to tear down the elevators and build a real one. The contract was let to the Monolith Builders, Inc.

The Mulvane company's property now is a money-making plant. The mill buildings are of brick construction, and a warehouse is of cement block construction. The grain elevator is reinforced concrete throughout. Fire insurance rates were reduced 87% of the rebuilt plant. Total bushel capacity of the 14 bins of the elevator 18,000 bus.

In the mill building a 25-HP. gas engine is installed, furnishing power to a 3-pair high mill, and a grinder with small leg to overhead mill feed bins. Leg has 6x4 buckets.

The engine also furnishes power to the No. 25 corn sheller, and a shaker feeder in the pit of the elevator.

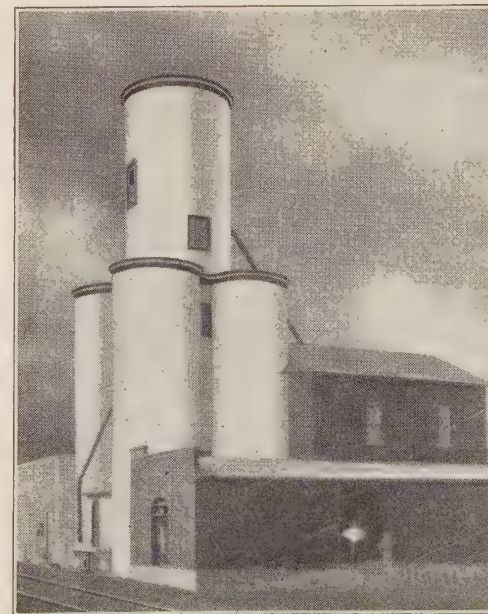
An automatic switch and 2-horsepower motor unit furnish the power to drive the air compressor for the Globe Combination dump.

In the headhouse is a 10 HP. 900 RPM motor, driving an all-steel leg having 1250 bus. per hour capacity, 11x7 buckets, 5-ply 12-in. rubber belt. Also drives the No. 5 Invincible Corn and Cob Separator, which is fitted with wheat screens.

A ball-bearing wood manlift is installed from workfloor of elevator to second floor of headhouse.

One 5-bu Richardson Automatic Scale is installed on the distributor floor of the headhouse.

THE CORN BORER quarantine has been revised, effective May 1, to limit it to the areas in each state actually designated as infested.



Concrete Elevator at Mulvane, Kan.

U. S. R. R. Labor Board Will Give Consideration to Shippers.

The real party in interest in the negotiations between the railroad managements and the employes before the U. S. Railroad Labor Board, the public, has never been represented. This is the chief reason why the efforts of the managements to cut down the labor cost have been unsuccessful, as the Board seemed totally oblivious to the necessity of reductions to correspond to those made in all industries except transportation.

The National Industrial Traffic League tried last year to get in an appearance before the Board, but was denied.

Again the League by a letter Apr. 13 attempted to get leave to file orally a petition for intervention, and tho denied the opportunity for oral presentation, was given leave to file "such written or printed evidence as it may desire, pertinent to the elements or factors set out in the Transportation Act, as the basis upon which the Board must fix wages."

The attorneys for the League, John S. Burchmore and Luther M. Walter, in their petition for intervention stated that,

It is the view of the National Industrial Traffic League and of the shippers on whose behalf it appears, that the railroads should not be required by any order of the Labor Board to pay or to continue paying a higher scale of wages to that general class of labor which is used alike in railroad and commercial industry, than is paid currently in commercial industry for such comparative employment; and it is the further view of the said League that the wages for such classes of labor vary so widely in different parts of the country and in different towns and cities that they do not lend themselves to uniform treatment.

The League maintains that the Transportation Act does not authorize the Labor Board to fix wages for various classes of employes to be paid thruout the country. The League objects to the practice of the Board of permitting witnesses to testify without being placed under oath and to introduce irrelevant matter and hearsay.

The League submits that the Board should set aside all its decisions and orders purporting to fix railroad wages and leave to the corporations and the men the question of readjusting their wages, subject to further proceedings in the manner provided by the law.

Taxing Periodicals Out of the Mails.

Moderate postage rates would keep the newspapers, invaluable means of intellectual intercourse, within reach of all. The publishers are asking for the repeal of the last two increases, those which went into effect in 1920 and 1921. This relief, if granted by Congress, would retain the rates which were in effect just prior to these increases. Legislation for this purpose would give the Government 175 per cent more than the pre-war rates, and would not relieve the publishing industry of one cent of the other Federal taxes now paid by other industries. In other words, publishers of newspapers and magazines are not asking for preferential treatment but for justice in order that they may continue as an integral part of our social and economic life.

THE Toledo Produce Exchange is to broadcast market information by radio.

TALLULA, ILL.—The Tallula Farmers Elevator Co. is contemplating the installation of a radio-telephone to receive market reports. S. C. Shaw is mgr. of this company.

RALSTON, IA.—A radio-telephone to receive Omaha market reports has been installed in the plant of the Ralston Farmers Elevator Co. of which E. L. Keger is mgr.

A REPORT by an auditing company, submitted to the North Dakota Industrial Commission, shows a book deficit of \$187,194 for the state owned mill and elevator. All other state owned industries also showed deficits as of Dec. 31, the total being \$653,993.

Grain Carriers

THIRTEEN railroads are in the market for a total of 7,250 new freight cars.

THE New York State Barge canal opened official for the season on May 1.

WILMINGTON, ILL. I am having lots of trouble getting cars.—Arthur J. Ward.

MARCH expenses of the U. S. Shipping Board were \$3,704,000 in excess of revenues.

A MESSAGE from Port Colborne, Ont., on April 28 said the elevators there were filled and 14 steamers were waiting to unload.

THE JOYLAND and the Arabian, grain laden, ran aground in the St. Lawrence River, recently. The Arabian was released and reloaded at Prescott.

CHICAGO, ILL.—James P. Haynes, formerly commissioner of the Sioux City Traffic Bureau, is now traffic director of the Chicago Ass'n of Commerce.

A HEARING has been held by the Corporation Commission of Oklahoma on rates on grain and grain products between points in Oklahoma and adjoining states.

A HEARING was held at Omaha May 2 on the objections by the Grain Exchange to the Union Pacific tariff raising the rates on grain going to the Pacific coast.

ORDERS were placed by the C. & N.-W. Ry. on Apr. 28 for 1,250 box cars, among other equipment. Previously, proposals of car builders to construct the equipment had been rejected on account of price.

STANDARDIZATION of freight cars, and central control of car distribution, has been recommended by the joint congressional commission of agricultural inquiry. Unification and joint operation of rail facilities at terminals was also recommended.

EFFECTIVE Apr. 29 the Canadian Pacific reduced rates on grain between the head of the lakes and points in Eastern Canada and the United States, 5½¢ per 100 lbs., when for consumption at destination. Export rates were cut one cent Apr. 20.

FREIGHT TRAFFIC in 1921 was 25.15% less than that of 1920, as to tonnage, but the tonnage of agricultural products showed a slight increase. In 1920 the products of agriculture carried amounted to 220,049,724 tons, and in 1921, to 222,722,672 tons.

DURING the 13 days in April following the opening of navigation 9,398,560 bus. of wheat and 5,751,710 bus. of other grain passed thru the Sault Ste. Marie Canal, compared with 8,592,826 bus. wheat and 7,418,000 bus. other grain shipped in 23 days of navigation in April, 1921.

RAILROAD freight traffic during the first three months of 1922 was heavier than for any previous first quarter in the past 5 years. The number of cars loaded with revenue freight from Jan. 1 to Mar. 31, inc., was 9,996,014, compared with 9,015,934 in the same period in 1921.

REDUCTION of freight rates on Canadian railways by 40%, which will be a return to the 1919 level, will be made before the 1922 crops begin to move. An announcement to this effect was made by Premier Norris of Manitoba in an address delivered recently before the provincial Liberal convention.

AN EFFORT is being made to have the barge rates on the Erie Canal from Buffalo to New York City reduced to a basis that will compete with the water route via Montreal and thus divert a large part of the traffic that is attracted to that Canadian port. In support of the request, it is pointed out that this would tend to relieve the congestion in Canadian ports, which have frequently blocked since the heavy movement of traffic over that route began.

NOTICE has been given by the Missouri Pacific, Missouri Kansas & Texas, and International & Great Northern, pending publication of tariffs, that the application of Texas Group 3 rates will be restored on grain and grain products to Laredo, Tex., destined to points in Mexico. An effective date has not been announced.

A PROTEST was made to the Shipping Board recently by Geo. S. Jackson, E. F. Richards and G. Stewart Henderson of Baltimore against the enforcement of the law providing that no preferential joint rail and ocean rate on grain for export shall be permitted unless such exports are carried in United States ships.

A HEARING has been held at St. Louis by an examiner for the Interstate Commerce Commission in the complaint of the St. Louis Merchants' Exchange against southern railroads requesting the establishment of carload rates instead of any quantity rates south of the Ohio River. The hearing was continued in Nashville, Tenn.

JOHN W. ESHELMAN & SONS were charged unreasonable rates on raw material in and finished poultry and stock foods out of, Lancaster and York, Pa., is the opinion of Examiner J. E. Smith of the I. C. C. Reparation is recommended for the period Mar. 1, 1920, to Jan. 3, 1922. Transit rules since established are satisfactory.

A NEW export bill of lading is to be adopted by the Shipping Board on Emergency Fleet Corporation boats. Officials have stated it will be more equitable than the B/L framed under the new Hague rules, and it is expected that it will embrace a package liability of \$500, as compared with the £100 liability carried by the Hague B/L.

A COMPLAINT by the Albers Bros. Milling Co., Oakland, Cal., against the Southern Pacific, alleging that rates on grain and grain products contained in shipments from Oakland to South Vallejo, Cal., were unreasonable has been dismissed by the Interstate Commerce on the ground that it was not shown that the complainant had been damaged.

THE RAILROAD Labor Board is attacked in the report of the Congressional joint commission of inquiry into the agricultural situation, for assuming jurisdiction in disputes which have not previously been the subject of determination between employer and employees. The com'te said that distinctions between "general wage levels on railroads and those in other industries cannot well be preserved by rigid public regulation."

ST. LOUIS, MO.—At a recent meeting of traffic organizations here, plans were completed for the establishment of all water freight service between St. Louis and Texas coast ports. The service was to start Apr. 20, and the plan is to have a steamer leave New Orleans for Texas points each 10 days thereafter. The Barge Line will handle the traffic to New Orleans, using, at this end, the new 500-ft. government dock, just completed.

A DEVICE has been developed to record automatically the passage of cars in a train at given points. It makes a complete record of all information given on a special card placed upon each car, and includes the exact minute when the car passed the checking stations. It may also be made to show the temperature inside the car, a feature that would be especially valuable in the case of refrigerator cars loaded with perishable commodities.

THE Interstate Commerce Commission now makes railroad rates. This is not wise. The railroads should be free to make rates, with the Commission to act as a corrective body when such rates should be proven unfair and unreasonable. The present system is dangerous. It will lead to the breaking down of the railroads and spells ultimate Government ownership.—Chairman Ainey of Pennsylvania State Public Service Commission, before House Interstate and Foreign Commerce Com'te.

THE FASTEST time ever made in transporting a shipment of grain from any port on the Great Lakes to tidewater at the Atlantic was on Jan. 16, when a solid train of 50 cars of wheat arrived at the Girard Point Elevator, at Philadelphia, from Buffalo. The run was made in 27 hours, with zero temperature prevailing over the northern portions of the route. The 50 cars contained about 95,000 bus. of wheat.

IDLE FREIGHT CARS Apr. 15 numbered 491,513, according to the latest report of the American Ry. Ass'n, an increase of 70,967 compared with Apr. 8. Of the 70,967 increase in idle cars, 65,559 were coal cars, which totaled 187,918 surplus on Apr. 15, while idle coke cars numbered 2,842, an increase of 613. Of the total idle cars, 333,393 were surplus freight cars, an increase during the week of 73,788, while 158,120 were in bad order, needing repairs, over and ice. Surplus box cars numbered 98,686 on Apr. 15, increase of 6,297, and stock cars 19,431, an increase of 79. Loading of revenue freight totaled 714,088 cars during the week which ended on Apr. 22, compared with 706,713 during the previous week, or an increase of 7,375 cars. This was an increase of 9,456 cars over the corresponding week last year, but a decrease of 3,689 compared with the corresponding week in 1920.

Don't Sign Releases on St. Paul Delay Claims.

THE C., M. & St. P. Ry., it is said, is about to make an attempt to foreclose the rights of shippers to have their delay and deterioration claims paid in full by having its representatives call on the shippers to obtain their signatures to some kind of a settlement direct.

Owen L. Coon, railroad claim attorney, who has worked up these claims successfully for shippers, is now urgently advising them not to give any signed statements of any kind. He says:

"You cannot be expected to understand how much you will lose by listening to proposals in settlement. You have a great deal of money involved and I am on the job for the purpose of protecting your interests to the limit.

"Refer these people to me in every case as your legal representative. I shall protect your interests to the last cent. I can't do this if you give these representatives any signed statements of any kind or make any agreements to settle with them without my approval. In the course of two weeks at the outside, if this railroad does not see fit to recognize their responsibilities in these cases of delay they will be summoned into court and the settlement after these cases have been tried will cost them one hundred cents on the dollar in addition to interest, court costs and attorney's fees."

Wasteful Management of Railroads by Government Bureaus.

JULIUS KRUTTSCHNITT, chairman of the board of the Southern Pacific Railroad Co., concluded his testimony before the Senate interstate commerce com'te Apr. 13. He said:

Beginning with the Adamson law the labor costs of Class I roads had been increased by \$2,230,000,000 by 1920, or almost equal to the total operating expenses of the roads in 1916.

Two bad features that stood out in government operation were extreme centralization of authority, established by the first director (Mr. McAdoo), and excessive and unintelligent standardization.

Worse, however, the operating organization and personnel were completely disorganized by depriving officers of all control over wages, discipline, rules and working conditions.

To the standardized rules and working conditions created by the director general of the railroad administration must be attributed much of the criticism that he has incurred for wasteful payments in reclassifying employees, making skilled mechanics out of workmen by a stroke of the pen, paying punitive overtime, and making large retroactive payments to men of little skill, who received gratuities of from \$1,000 to \$2,000 each with unbounded surprise. So obviously unfair and unreasonable were many of these agreements that their terms have been substantially modified in behalf of the railroads by the labor board.

The baneful effects of government practices necessarily continued after the return of the properties. The unopporal task of seeking before the public an increase in revenue to meet the increased expenses, was left to the railroads.

Feedstuffs

BAKERSFIELD, CAL.—A poultry feed mixing plant has been installed by the Bannister Grain Co.

CONCORD, GA.—R. F. Strickland's fertilizer and feed mill was burned recently incurring a loss estimated at \$75,000.

EL RENO, OKLA.—A warehouse costing \$10,000 will be built here for the local branch of the Waldo Alfalfa Mill Co.

PAYETTE, IDAHO.—The Idaho Alfalfa Milling Co. ground 5,000 tons of alfalfa hay into meal during the past winter.

VAN BUREN, ARK.—A wholesale feed house will be opened here to be conducted by Glenn Crockett and O. T. Goldsmith.

OLTON, TEX.—The Olton Milling Co. has started to operate a new department manufacturing meal, hog and poultry feeds.

SUSSEX, N. J.—The firm name of the Lawrence & Harden Co. has been changed to the Consolidated Feed, Coal & Lumber Co.

CALEDONIA, N. Y.—The alfalfa mill of George and H. Ross McKay was damaged to the extent of about \$8,000 by a recent fire.

RATON, N. M.—The M. O. Drumm Co. has discontinued its grocery business and hereafter will be engaged in the business of handling feeds.

PLAINVIEW, TEX.—The capacity of its feed milling plant will be increased by the Ayres-DeLoach Grain Co., making a specialty of poultry feed.

NEBRASKA CITY, NEB.—The property of the Wash-Co. Alfalfa Milling Co. will be offered for sale by auction May 12 by B. H. Dunham, referee in bankruptcy.

BUFFALO, N. Y.—H. T. Morey has been elected president of the Chippewa Feed & Grain Co. He is also active manager, and C. G. Meyer is secretary-treasurer.

KRYPTON, KY.—The Perry & Leslie Feed Co. has been incorporated with capital stock of \$10,000. Incorporators include J. C. Baker, J. M. Eversole, Jr., and D. W. Shepherd.

ON ACCOUNT of flood conditions, the annual meeting of the Interstate Cottonseed Crushers Association has been postponed to meet in New Orleans, June 7, 8 and 9. The rules committee of the association will meet June 5 and 6.

OMAHA, NEB.—Mrs. Anna V. Cornish has been elected president of the Omaha Alfalfa Milling Co. to succeed J. F. Hughes, who resigned to give his time to other interests. J. O. Lacke will continue as general manager for the company.

BRUNSWICK, Mo.—The McAfee Alfalfa Milling Co., having its main office at Moberly, has just put in alfalfa grinding machinery at Brunswick, where Manager C. J. Westenkuehler states that sufficient alfalfa is grown to keep the plant running.

THE ORDER issued by the West Virginia dept. having jurisdiction over the registration of feedstuffs, and requiring that manufacturers of mixed feeds offering their products for sale

in the state to specify the percentage of each ingredient has been rescinded.

THE NAME "Ox Horn" has been registered as trade mark No. 142,527 by Pease & Dwyer Co., Memphis, Tenn., for use with feed composed of unbolted corn meal, wheat bran, cottonseed meal and cottonseed hulls.

ON COMPLAINT of the Western Grain Co. the Interstate Commerce Commission has found the rates on black strap molasses from New Orleans and Mobile to Birmingham, Ala., to be unduly prejudicial, and has directed reparation to be paid by the L. & N. R. R. Co.

KANSAS CITY, Mo.—The Corn Products Refining Co. has closed its new plant here, and will enlarge it while it is idle by building about 250,000 bus. additional storage capacity and by adding an 8-story building about 100x200 ft. The latter building is to be utilized in applying a new process in syrup making. This process will improve the product, increase the percentage of syrup obtained from the corn, and at the same time decrease the percentage of feed products.

CHICAGO, ILL.—The Loomis Curry Smith Co. has organized to manufacture feeds. All the members of the firm have been engaged in the feed business for some time. Edward J. Loomis, pres., was formerly a member of Edwards & Loomis; T. Pomeroy Smith, vice-pres., was with the same firm; J. Clifford Curry, sec'y and treas., was at one time connected with Edwards & Loomis and more recently has been with Rosenbaum Bros.; and Geo. Luce, who also has been with Rosenbaum Bros. In addition, several salesmen for the firm have been similarly connected with other feed manufacturers.

A HEARING of a case brought under the Texas Weights and Measures Act was held in court at Sweetwater recently. The defendant was the Great West Mill & Elevator Co., of Amarillo, Tex., which had been charged with packing milled products containing less than the weight specified in the law. The defendant attacked the validity of the law, and the court indicated some doubt on the point, but whatever doubt he may have had he resolved in favor of its validity. A test case is to be made of the action, and notice of appeal to the Court of Criminal Appeals has been given.

PEORIA, ILL.—Manufacturers of sweet feeds are interested in having Cuban blackstrap molasses free of duty as provided in a bill which has passed the House of Representatives, for

the benefit of farmers who keep stock; but the Peoria County Farm Bureau has just sent out a circular letter opposing this free entry on the ground that if blackstrap molasses is admitted free no corn consuming distillery can compete with molasses distillery in the production of alcohol, and the closing of the distillery to corn would deprive the American farmers of a market for 40,000,000 to 50,000,000 bus. of corn annually.

A FEED DEALER of Iowa was recently cited to a hearing under the Federal Food and Drugs Act for shipping into interstate commerce a molasses feed in bags which he had refilled but which bore the name of another feed manufacturer. The sacks also bore a brand name under which the original owner of the sacks sold a stock feed of much higher grade than the feed with which the sacks were refilled. A dealer who contemplates refilling used feed sacks on which is printed the name of another manufacturer or any statements that are not correct when applied to the product he uses in refilling the sacks should be very careful to see that all such statements are obliterated.

Wool Pools Resulted Unsatisfactorily.

Producers of wool who put their product into the various state pools are far from unanimous in their feeling that the scheme has resulted to their profit. In the case of the Iowa pool, V. G. Warner, who acted as manager, has blamed the government for the situation, claiming erroneous figures of supply were issued last fall, and that when the true facts became known the market advanced sharply altho Iowa wool had all been sold at the low prices. Thus does the child of governmental meddling come back to plague its parent.

Figures for twenty-two pools in all parts of the United States indicated an average of nearly 21 cents a pound. The Illinois State pool realized 16 cents, the Iowa pool netted 15½ cents and the Kansas pool only 11½ cents a pound. These pools were sold last fall when wool was cheap. Producers in some states which received a lower price than the average for the country have expressed disappointment over the outcome.

Farmers complain that when they placed their wool in the pools they lost control over the time it should be sold and that the men on whose judgment they relied as to when it should be marketed had failed to size up the situation correctly.



A Heavy, Practical Floor Brush for Sweeping Grain from Cars

Especially recommended for Grain Elevators, Warehouses, etc. For sweeping grain cars and elevators the STAR BRUSH has no equal.

One brush guaranteed to outwear four or five brooms and do cleaner and faster work.

Built on a hardwood block 14 in. wide and flared out to an 18 in. sweep so as to sweep into corners and edge of car.

If not satisfactory after 60 days' use we will refund your money, or we will ship on approval.

\$16.00 per doz. f. o. b. Minneapolis.

FLOUR CITY BRUSH CO.

422 So. 4th St.
MINNEAPOLIS, MINN.

Feed Movement in April.

Receipts and shipments of feedstuffs at the various markets during April, compared with April, 1921, were as follows:

	Receipts		Shipments	
	1922	1921	1922	1921
Cincinnati, tons	1,890	810		
Chicago, lbs.	26,074,000	19,610,000	89,202,000	58,360,000
Kansas City, tons				
bran	3,380	1,609	17,320	13,260
Los Angeles, cars	42	49		
Milwaukee, tons	3,850	1,470	25,319	15,590
New York, tons	180		6,600	
San Francisco, tons				
bran	103	155		
St. Louis, sacks	114,350	66,100	575,480	112,180

Supply Trade

Chicago, Ill.—The 2d annual Pageant of Progress Exposition will be held on the Municipal Pier, July 29-August 14.

Kansas City, Mo.—Carter-Mayhew Mfg. Co. have opened an office in the New England Bldg. E. W. Lott will be in charge.

Chicago, Ill.—A second advance of 2 cents per gallon has just been made in the price of linseed oil, which is now selling at 94 cents for the raw oil in barrels in carloads.

A 100% garlic extractor may be necessary to wheat handling elevators, but the average wheat handler is perfectly satisfied if the scent is entirely destroyed before he meets the prospective wheat buyer, or his best girl. Its presence is disconcerting in both cases.

Price fixing by the owner of a trademarked article is provided for in the Stephens-Kelly Bill and is strongly advocated by the owners of the brands to prevent price cutting. They desire this special privilege for themselves; but why not repeal the anti-trust law so that all others could enjoy the same privilege of price fixing?

Chicago, Ill.—The Zeleny Thermometer System for recording the temperature of grain in bins, manufactured by the Western Fire Appliance Works, has been on the market for over 15 years. At the present time there are 123 working installations of this system. Complete information regarding the "Zeleny" will be sent Journal readers who write requesting it.

Philadelphia, Pa.—The exhibit of the Morse Chain Co. at the Knitting Arts Exposition in this city, week May 22nd-26th, 1922, will be found at Space 141-142. They will have on exhibit here a full line of Chain Samples and there will be in attendance representatives of the company qualified to give expert engineering advice on transmission problems.

Washington, D. C.—To allow time to determine whether the proposed rate reduction of 7 and 10 cents per 100 lbs. on cement between producing points in Pennsylvania and New Jersey to New York, N. Y., would discriminate against other producing territory, the Interstate Commerce Commission suspended the rates which were to have gone into effect May 1, until Aug. 29.

Chicago, Ill.—Weller Mfg. Co. has ready for distribution the following catalogs: 35L, covering their line of elevator legs, spouting, bin bottoms, manlift; 35D, giving detailed information on the company's spiral conveyors; 35C contains much valuable information on conveying equipment. Every operator of a grain elevator who does not already possess these catalogs should write for them.

Chicago, Ill.—Henry Richardson, of the Richardson Scale Co., was in Chicago Apr. 27 exhibiting a working model of the car dump which he has invented. The model was complete in every detail, and faithfully portrayed the operation of a full sized dump. It was shown in the office of H. A. Foss, weighmaster of the Board of Trade, and in various offices of elevator operators and railroads.

Chicago, Ill.—The steel buyers of the middle west continue to complain of having to buy rolled steel at the Pittsburgh price plus the freight from Pittsburgh, altho made in and shipped from Gary, Duluth or some other western point. This price plan is said to add \$7.60 to the cost of every ton of rolled steel used in the Chicago district, altho it is supplied from the rolling mills in South Chicago and Gary. The more buyers kick against the Pittsburgh plus price the sooner will they get relief.

Kansas City, Mo.—The Burrell Engineering Co., of Oklahoma, was victorious in the suit brot by the Nichols Wire & Sheet Co. to enforce a sub-contractor's lien for \$462.88 for sheet metal and galvanized iron used to repair the elevator of the Norris Grain Co., of Illinois. The court of appeals decided in favor of defendant because the papers had been served on the Norris Grain Co., of Missouri, whereas the title to the property had been vested by the Kansas City Southern Ry. Co. in the Pioneer Trust Co., as trustee for the Norris Grain Co., of Illinois, which had no offices in Missouri. The suit failed because the right defendant was not named.

Minneapolis, Minn.—Carter Disc Separators have been installed in the following plants: Hanson & Barzen Mfg. Co., Thief River Falls, Minn.; Washburn-Crosby Co., Minneapolis, Minn.; Ervin Company, St. Cloud, Minn.; Twin City Trading Co., Minneapolis, Minn.; Princeton Mfg. Co., Princeton, W. Va.; M. W. Leahy, Burwell, Neb.; Hammel Henker & Co., Dubuque, Ia.; Stock & Sons, Litchfield, Mich.; Crookston Mfg. Co., Crookston, Minn.; Kansas Flour Mills Co., Kansas City, Kan.; G. Graham, Fair Haven, Minn.

Washington, D. C.—The Supreme Court on Apr. 24 in the case of the Federal Trade Commission v. Winsted Hosiery Co. held that the Commission had a right to require the manufacturer to change the branding of his merchandise from "wool" to "wool and cotton." The defendant claimed there was no deception of its customers, who were dealers, as all the dealers knew the goods were part cotton. Admitting this to be true, the Supreme Court held that trade rivals who marked their goods truthfully were unfairly affected by the practice.

Patent office fees were changed, effective Apr. 19, in conformity with the Act of Congress, approved Feb. 18. The filing fee on each original application, except in design cases, is now \$20 instead of \$15. The act also provides, in addition to the present charges for recording assignments or other papers, that an additional fee shall be paid for each additional patent or application involved in one writing. Applications received on and after Apr. 19 with only \$15 filing fee will not be returned, but will be given a filing date and number as of the day the full fee of \$20 is received.

Des Moines, Ia.—Globe Combination Auto Truck and Wagon Dumps have been installed in the following elevators and mills: Carter Shephard Mfg. Co., Hannibal, Mo.; Cherokee Mills, Burlington and Jet, Okla.; Cherokee Mill Co., Carmen, Okla.; Mound Ridge Mfg. Co., Hesston, Kans.; Macredie & Son, Clear Water, Kans.; Loveland Mfg. Co., Wichita, Kans.; Farmers Co-op. Union, Lyons, Kans.; Clark Brown Grain Co., Bondurant, Ia.; Farmers Elev. Co., Orienta, Okla.; Occident Elev. Co., Beach, N. D.; Terry, Mont., Ray, N. D.; Grenora, N. D. and Eldridge, N. D.; Arkansas City Mfg. Co., Helena, Ark.; Hunt Grain Co., Wichita Falls, Tex.; Alva Roller Mills, Ashley, Okla.; Valier Spies Mfg. Co., Mulberry Grove, Ill.; Farmers Mill & Elev. Ass'n, Devils Lake, N. D.; Lord Grain Co., Emporia, Kans.; Farmers Elev. Co., Hamburg, Ia.; Sawyer Equity Ex., Sawyer, Kans.; Millstadt Mfg. Co., Millstadt, Ill.; Ferney Farmers Elev. Co., Ferney, S. D.; Walnut Creek Mfg. Co., Great Bend, Kans.; Kelley Grain Co., Muscotah, Kans.; Shawnee Mfg. Co., Topeka, Kans.; Larrabee Flour Mills, Nashville, Kans.; Howard Grain Co., Mt. Hope, Kans.; Red Star Mfg. Co., Nashville, Coats and Bluff City, Kans.; Farmers Mill & Elev. Co., Assaria, Kans.; Oline & Atherton, Sterling, Kans.; Farmers Co-op. Grain & Mfg. Co., Alden, Kans.; Home Lbr. & Grain Co., McPherson, Kans.

THE APPROPRIATION for government work in eradication of the barberry bush has been increased from \$200,000 to \$500,000 by an amendment passed by the senate.

The Carter Disc Separator.

The advent of the Carter Disc Separator bids fair to become one of the important developments in the grain cleaning industry for the past decade.

This simple contrivance, running without noise or vibration, makes possible a complete and perfect separation of wheat from wild oats, weed stems, wild peas, cockle, mustard, wild buckwheat, etc., with a surpassingly low consumption of power, very little floor space, low installation cost, and practically no attention.

If the word of hundreds of the country's leading millers, as expressed by numerous testimonials, bears any weight, the work of the machine is marvelous.

The design of the machine is simplicity itself, the basic principle being a series of pocketed discs mounted on a horizontal shaft revolving through the grain to be cleaned. On the sides of each disc are from 2000 to 24,000 under-cut pockets (the number depending on the size and type of disc). These pockets are somewhat the shape of a miniature elevator bucket, and in effect they act precisely like an elevator bucket. The size and shape of the pockets determines the class of separation to be made, that is, a pocket made to separate oats from wheat is just the right size to pick out the wheat alone, rejecting oats, barley and larger material. In like manner, a seed pocket will pick out seeds and reject the cleaned wheat. The grain picked up by the discs is discharged at the side of the machine and the larger rejected particles are tailed over at the end of the machine. Each disc is provided with conveying paddles which keep the mass of grain moving at the right speed from the inlet to the tail end of machine.

In the accompanying illustration, Fig. 1 is from an actual photograph of the discs used in picking out the wheat. The enlarged section, shown through the glass, is approximately half size. It shows how the under-cut pockets select the wheat kernels and reject everything that is longer. Note the oats and barley dropping back.

A phantom view of the separator is shown by Fig. 2. The principal working parts are clearly outlined and show how the separation is made. The white lines indicate the outer casing.

The grain is delivered to the feed hopper at the head end of the machine which is provided with a series of slides controlling the amount of grain fed to the machine. These inlet openings admit the grain behind the head end discs. The discs, revolving at a speed of from 40 to 60 R.P.M. through the grain, pick out the wheat and reject the oats, barley and longer material.

The paddles in the middle of each disc act as a screw conveyor, forcing the rejected mate-

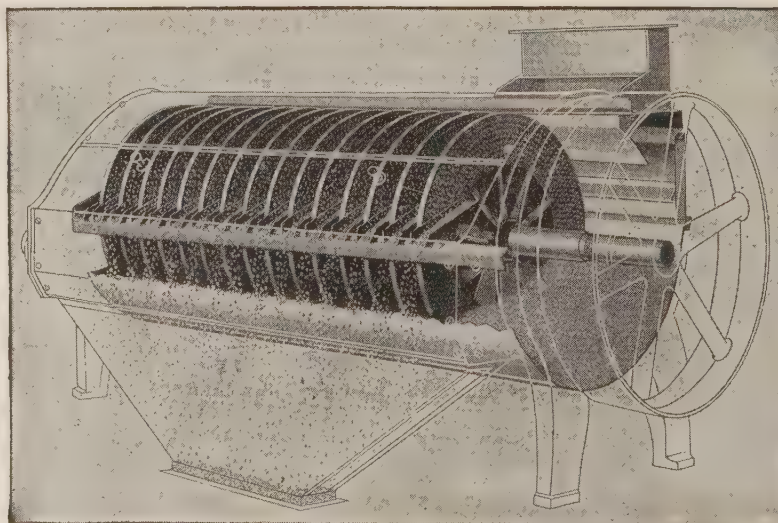


Fig. 2. Phantom View of the Carter Disc Separator.

rial from disc to disc until it is finally tailed away at the end of the machine free from wheat. The clean wheat carried up by the pockets is dropped into troughs, set between the discs. These troughs all discharge into a common hopper.

The separators are made in three distinct types. The Wheat type, the Seed type, and the Combination type. The wheat type separates oats and barley from wheat (including Durum), oats and barley from rye; seeds, small barley and wheat from oats.

The seed type removes wild peas, cockle, buckwheat, pigeon grass, all small seeds, weed stems, sticks, straw, sand, dirt, and other foreign matter from wheat.

The combination type machine, made in small capacities, removes oats, barley, wild peas, cockle, and all small seeds, weed stems and foreign matter in one operation.

With the discs mounted closely together on one central shaft, run by one single set of gears or direct from the belt pulley, the Carter Disc Separator is simplicity and compactness to the last degree. Its compactness means that it not only takes up little space in the elevator, but that it can be fitted into the established circuit of machinery with comparative ease and at small expense.

There is no vibrating or shaking to overcome, and little power is lost in friction. The total power required to drive a 250 bushel Carter is less than three horsepower. The rotor is mounted on self-aligning ball bearings which require no attention other than cleaning and regreasing about once a year.

The manufacturer, the Carter-Mayhew Mfg. Co., claims that the disc separator will do these things:

1. Make an ultra-thorough separation of the wheat,
2. Save wheat you're losing in tailings and screenings,
3. Reduce cleaner maintenance to practically nothing,
4. Eliminate the weekly elevator clean-up,
5. Polish and increase the test weight of oats, enabling them to be sold at a better price,
6. Save the light wheat often lost by air suction,
7. Scour the wheat and raise the test weight about 1 lb. per bushel.

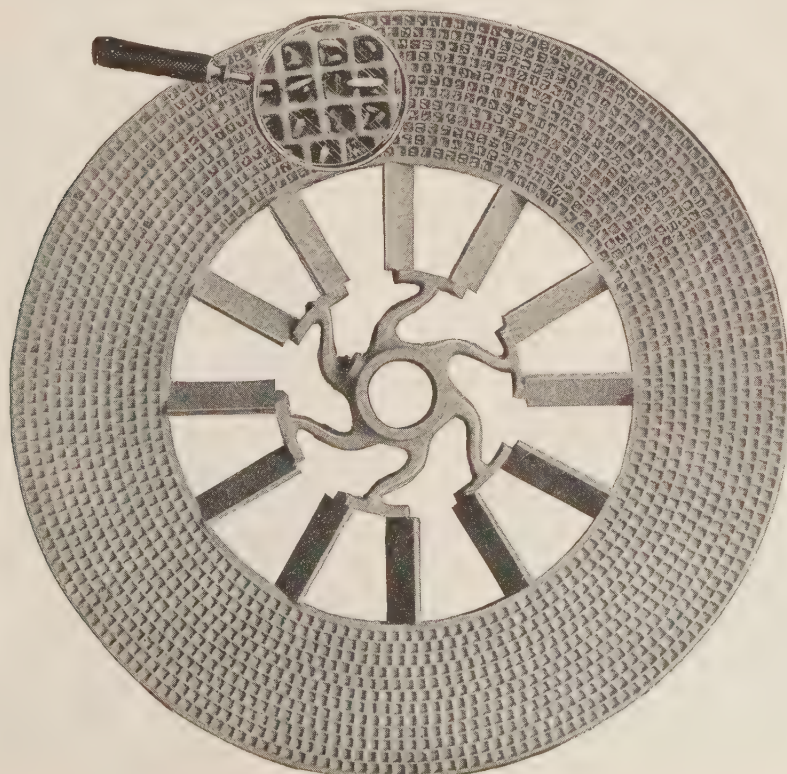


Fig. 1. Disc of Carter Separator Used in Picking Out Wheat.

Report Milling Values of Canadian Wheats.

The University of Saskatchewan has issued a report of the results of investigations to determine the milling values of the different varieties of wheat grown in western Canada. The standard varieties were tested, as well as some that have been grown experimentally on the station farms. All samples were grown at Saskatoon.

The several varieties have been placed in groups according to their milling values. Some results of the investigations follow:

Group 1. Those having highest milling value, and including marquis, red fife, Kitchener and red bobs.

Group 2. Those having fairly good milling value, but not equal to those in Group 1. Includes white bobs, white fife and Taylor's wonder.

Group 3. Largely bearded varieties. Lower milling value than Group 2. Includes pioneer, prelude, Chelsea, and Preston.

Group 4. Includes only the ruby variety. Results very contradictory.

Group 5. Of poor quality. Includes club, red stone, Alaska and Kinley.

Group 6. Considerable variation in values. Includes amber durum varieties, such as kunka acme and Pellissier.

Group 7. Includes red durum. Milling quality found to be low.

Stripping Rice from Standing Stalks.

Western grain dealers are familiar with the headers used to cut wheat on the bonanza farms; and much the same idea is worked out in the new rice stripping machine, which, however, does not cut the stems.

This stripper is equipped with a cylinder with six bars, on which are mounted fingers, or teeth, of the proper shape for stripping the rice. Revolving as it moves along, the teeth of the stripper comb the rice from the straw and throw it up over the cylinder in the hood and drop it into a trough.

This leaves the straw standing in the fields to be plowed under and used as fertilizer for the next year's crop.

This stripper, being mounted on, and attached to, one of the regular harvesting tractors, is able to work successfully in any rice field. When the rice comes from the stripper, it is from 60 to 80 per cent threshed clean off the stem; the other 20 to 40 per cent consists of blades, whole heads, and part heads that have been jerked off with the rice grains still intact.



The New Silent Emerson Dockage Tester

Has a new roller feed device and a screening arrangement. It is noiseless and free from vibration. Either electric or hand driven. Adopted by the Federal Inspection Departments.

We Will Take Your Old Tester in Trade

Emerson Mfg. Co.

2601 32nd Avenue So.

Minneapolis, Minn.

ELLIS DRIERS

× ×

It has never been the policy of this company to make radical changes in the construction of its grain driers. We have never had to because the inherent drying principles embodied in the first Ellis Drier were correct. We have, however, been alert to improvements which constant use has shown to be essential. Any conservative change which would really better the machine has been made.

That is why you can purchase an Ellis Drier with absolute assurance of satisfaction and with the conviction that the Ellis Drier has no counterpart on the market today.

× ×

THE ELLIS DRIER CO.

Roosevelt Road and Talman Ave.

CHICAGO, U.S.A.

Supreme Court Decisions

Services by Shipper do not Entitle Him to Lower Rate.—The services rendered by a shipper in providing trainloads of its goods all loaded and ready to move, and in providing special facilities for unloading trains at destination, including crews to work at night, so that there was no loss in the use of the cars, are compensated for by the improved services the shipper obtains, and do not entitle it to cheaper rates for the transportation.—Public Service Commission of Washington v. State ex rel. Great Northern Ry. Co. Supreme Court of Washington. 204 Pac. 791.

State Courts Have Jurisdiction of Interstate Shipments.—The Carmack Amendment to the Interstate Commerce Act, (U. S. Comp. St. §§ 8604a, 8604aa) does not oust the state courts of jurisdiction in cases of interstate shipments, but requires that the rights and liabilities of the parties in actions in a state court for damages arising from an interstate shipment shall be determined in accord with the federal statutes relating thereto and the common-law rules as to common carriers' liability accepted and applied in the federal courts.—New England Fruit & Produce Co. v. Hines. Supreme Court of Errors of Connecticut. 116 Atl. 243.

Buyer Can Recover from Seller for Deterioration When Carrier Is Seller's Agent.—If a carload of corn, tendered to and accepted by buyer as that which seller had agreed to ship and had shipped to its own order, was not the corn shipped by seller, and if seller had been paid for corn so accepted by buyer, the seller would be indebted to buyer for the full value of such corn. On delivery to buyer of a carload of corn shipped by seller to seller's own order, after deterioration of quality during transportation, the buyer could recover from seller the difference in the market value of corn contracted for and that received; the carrier being the seller's agent for the delivery of the corn.—J. F. Wieser & Co. v. Granger Mercantile Co. Court of Civil Appeals of Texas. 237 S. W. 328.

Liability of Carrier for Flood Damage.—Where a carrier had warning of an oncoming flood in ample time to protect goods which had reached their destination and been placed in the freight-house, and did not take reasonable precautions to protect them after such notice, it was liable for the damage thereto, though the flood was an act of God for loss from which the carrier was not liable. A connecting carrier was not holding goods as warehouseman when they were damaged by a flood, so as to prevent an action against the initial carrier under the Carmack Amendment (U. S. Comp. St. §§ 8604a, 8604aa), where notice of the arrival of the goods had not been given the "notify consignee."—Ithaca Roller Mills v. Ann Arbor R. Co. Supreme Court of Michigan. 186 N. W. 516.

Transfer of Title by Indorsement of B/L.—Where an importer of goods had transferred title thereto by indorsing the B/L with that intent to a bank which advanced the money for the purchase price, and the bank directed the delivery of the goods to an agent for the importer, who received and disposed of them without knowing of the sale to the bank, the fact that the agent was in ignorance of the sale did not prevent his conduct in the transaction from being that of an agent for the bank, and did not change the legal status as to title as respects creditors of the importer.—Wickens v. Scheuer. Supreme Court of Washington. 204 Pac. 780.

Delivery of B/L to Unauthorized Person Held Conversion.—Where a draft for the purchase price of two carloads of lumber with B/L attached was delivered by the seller and buyer to a bank for collection from a subsequent buyer with instructions to credit the seller with the proceeds, and the bank, when the papers were returned to it, because the B/L included only one car, delivered them to the buyer to be corrected, and the buyer used them for his own purposes, the bank was liable to the seller for conversion by delivering the papers to a person not authorized to receive them.—Barnes v. Cunningham. Court of Appeals of Kentucky. 237 S. W. 375.

Grain Elevator Purchasing Grain for Transportation Into Another State Engaged in Interstate Commerce.—The business of a grain elevator which consisted in purchasing from producers within the state grain, almost all of which was transported for resale in markets in another state, is interstate commerce which cannot be burdened by the state, even though, after such purchase, portions of the grain may be diverted to state destinations. The North Dakota Grain Grading and Inspection Act regulating the inspection, weighing, and grading of grain, which permits purchases of grain to be made only by those who hold licenses from the state and act under a system of grading, inspecting, and weighing fully defined therein, and which by section 23 limits the profit the buyer can realize on his purchase, is, when applied to an elevator purchasing grain in interstate commerce, a regulation of interstate commerce.—Lemke, Atty. Gen. of North Dakota, et al. v. Farmers Grain Co., of Embden, N. D. Supreme Court of the United States. 42 Sup. Ct. Rep. 244.

Lessee Not Required to Restore Collapsed Grain Warehouse.—Obligation of lessee of grain warehouse to "take good care of the property and its fixtures and suffer no waste" did not require lessee to restore warehouse after its collapse without any fault or negligence on the part of lessee, but merely required it to take ordinary, reasonable care of the property during the term of the lease, and make such repairs necessary to return warehouse to lessor at the termination of the lease in as good condition as when received by lessee, reasonable wear and tear excepted. Where lease prohibited use of building for purposes other than a grain warehouse, the destruction of the building, making its use for such purpose impossible during the remainder of the term, through no fault or negligence on the part of lessee, terminated the relation of landlord and tenant, and released lessee from obligation to pay rent.—W. F. Norman v. Stark Grain & Elevator Co., Greenville, Tex. Court of Civil Appeals of Texas. 237 S. W. 963.

Measure of Damages from Carrier for Mixing Coal Dust with Corn.—Where corn had coal dust mixed with it during shipment, an instruction that the measure of damages was the difference in market value between clean corn and the corn in the condition in which it was delivered was not erroneous as omitting to direct attention specifically to the part of the corn injured when delivered to the original purchaser, who refused to accept it on account of the coal dust; there being no evidence of negligence in handling the corn or adding injury thereafter. In an action for damages to corn because mixed with coal dust in shipment, an instruction, that the measure of damages was the difference between the fair and reasonable market value in clean condition at the time and place of delivery and its fair and reasonable market value at the same time and place in the condition in which delivered, was not erroneous as authorizing the assessment of special damages without showing notice of the special contract of sale; the fact that the sale price and market price were the same not changing the character of the damages from general to special.—Director General of Railroads v. A. C. Schuff & Co. Court of Appeals of Kentucky. 237 S. W. 410.

Seeds

LOS ANGELES, CAL.—The Sloan Seed Co. has been incorporated with \$750,000 capital stock.

SPRINGFIELD, Mo.—The Springfield Seed Co. has been incorporated with \$90,000 capital stock.

NEW YORK, N. Y.—Garfield Williamson has given up the field seed business to give more time to grass seeds.

OMAHA, NEB.—The Western Seedmen's Ass'n, handlers of garden seeds, held their annual meeting here Apr. 29.

HELENA, MONT.—J. W. Manning, a county agent, has entered the employ of the Western Seed Co., of Missoula, at its Helena office.

LOUISVILLE, KY.—George W. Card, who has retired from the Card & Powell, seed dealers, will become executive sec'y of the Walnut St. Baptist Church.

MEMPHIS, TENN.—The Pease & Dwyer Co. has registered the letters P & D in a rectangular frame as trade mark No. 156,057 for field and garden seeds.

SPOKANE, WASH.—The Spokane Seed Co. suffered \$105,000 loss by fire Apr. 30 in its warehouse. The loss on seeds and fertilizer was \$80,000; all insured.

CHICAGO, ILL.—Everette Peacock, of the Everette R. Peacock Co., which is in bankruptcy, states that he expects to continue in business, even tho the courts decide the company must liquidate.

NEW ORLEANS, LA.—Local seedsmen have prepared an entertainment program for the Southern Seedsmen's Ass'n, which will convene here May 29 to 31, including a luncheon at the Southern Yacht Club.

ROOSEVELT, UTAH.—A seed house probably will be erected here for the J. G. Peppard Seed Co., of Kansas City, Mo., local seed growers having signed contracts to give Mr. Peppard the products of 22,000 acres.

PADUCAH, KY.—Plans are being made for the storage bins and unloading machinery for the Yopp Seed Co., in which a Richardson Automatic Receiving and Bagging Scale and a large seed cleaner will be installed. Kaucher, Hodges & Co. have the contract.

ADVANCES to 6,361 farmers aggregating \$784,734 had been approved up to April 1 under the seed loan act providing \$1,500,000 for relief of farmers in drought stricken areas of the northwest, Leon M. Estabrook, chairman of the seed loan committee, Department of Agriculture, announced May 5.

MILWAUKEE, WIS.—A complaint, signed by Henry Lunz, field agent of the seed inspec-

Receipts and Shipments of Seeds.

Receipts and shipments of seeds at the various markets during April, compared with April, 1921, were as follows:

	FLAXSEED.		Shipments	
	Receipts	Receipts	1922	1921
Chicago, bus.	36,000	18,000	2,000	22,000
Duluth, bus.	138,000	144,282	48,649	154,315
Ft. William, bus.	79,240	489,096	133,788	521,728
Milwaukee, bus.	21,425	44,170	21,073	.....
Minneapolis, bus.	208,180	452,650	51,780	835,280
CLOVER.				
Chicago, lbs.	1,009,000	1,570,000	1,030,000	1,594,000
Milwaukee, lbs.	226,696	145,798	1,434,818	1,114,562
New York, bags	500	.....	983	.....
TIMOTHY.				
Chicago, lbs.	780,000	2,601,000	2,129,000	2,708,000
Milwaukee, lbs.	231,415	345,696	1,075,101	432,160
OTHER GRASS SEEDS.				
Chicago, lbs.	1,039,000	1,144,000	1,552,000	2,396,000
KAFIR AND MILO.				
Kans. City, bus.	312,400	287,100	185,000	267,000
Los Angeles, cars	43	72	.....	.....
St. Joseph, bus.	.....	25,500	1,500	.....
St. Louis, bus.	54,000	75,700	10,590	36,750
Wichita, bus.	1,000	1,000
OTHER SEEDS.				
San Francisco, beans sacks	20,750	60,441

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and Deterioration Claims
Over 8100 Railroad Claims Collected
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MINNEAPOLIS, MINN.

References: Any bank, mercantile agency, commission firm or the editor of this publication.

tion division of the state dep't of agriculture, and charging violation of the state agricultural law, has been filed against H. A. Saeger, local representative of the Dunkirk Seed Co., Dunkirk, N. Y. It is alleged that in a shipment of 400,000 packages of seeds, sold at 5 and 10 cents a package, 20% to 30% of the seeds were below standard.

WASHINGTON, D. C.—A bill introduced by Senator Norris of Nebraska provides that seeds "transported into any state or territory or the District of Columbia, and remaining therein for use, consumption, sale, or storage, shall, upon arrival within the limits of such states or territory or the District of Columbia, be subject to the operation and effect of the laws of such state or territory or the District of Columbia enacted in the exercise of its police powers to the same extent and in the same manner as though such seeds had been produced in such state or territory or the District of Columbia, and shall not be exempt therefrom by reason of being introduced therein in original packages or otherwise."

From the Seed Trade.

Clover Seed Advances.

Toledo, O.—Miss Clover still has many friends as the season comes to a close. Cash demand remains fair and commanding big premium over October. Stocks here were light throughout the end of the season. Now said to be exceedingly small. Cash seed quoted slightly lower, with very little trade.

October is strong with better demand. Some investment buying, also profit taking on bulges. General reports indicate that clover has come through the winter in good shape. Crop hazard ahead affords many opportunities to the investor.—Southworth & Co.

Timothy Shipments Large.

Toledo, O.—Timothy seed came to life this week. Shipments have been large. Eastern demand good. A reduction in Toledo stocks is extremely welcome. Buyers have been timid but with low stocks in other sections dealers will turn to Toledo.

One dull day follows another. Nothing new in regard the seed markets. Undertone is firm and offerings very light. Speculative trade light. Stock clover decreased 682 bags this week. Alsike stock decreased 196 bags. Timothy decreased 4,043 bags. Timothy stock now figures 26,996 bags.—C. A. King & Co.

Flaxseed Surplus of Argentina Reduced.

Minneapolis, Minn.—The crushing machinery of the country seems to be gradually being moved to New York Harbor and unless a new tariff encourages our farmers to raise more flax, it will become more and more difficult to secure domestic seed oil. The late seeding season this year and values compared with a year ago should cause an increased acreage, but reliable estimates cannot be made before June 1.

Latest advices on the India crop are that their surplus new crop will not exceed 7 million bushels and Argentine estimating a carry-

over of 4 million bushels added to this crop would make this year's surplus about 24 million bushels as compared with about 55 million bushels shipped last year. Argentine speculators are reported as sellers, but it is stated farmers are not inclined to market their seed at present prices.—Archer-Daniels Linseed Co.

Timothy Furnishes Excitement.

Toledo, O.—Timothy furnished some excitement this week. Dear old tim. Will it ever come into its own? Some think it is due. Why this sudden change in sentiment? Must be on the discovery that a lot less timothy is laying around than figured. We've become thoroughly impregnated with the idea that this country has been full to the neck and suddenly learn it is not so. Toledo stock constantly in the show window has loomed big, but it is beginning to dawn on some it is "not such a much." Guesses range from fifteen to twenty thousand bags in Toledo. It is possible no other market has any accumulation of consequence. The flooded districts which cover some territory could easily absorb our surplus and allow us to start with a clean slate.—J. F. Zahm & Co.

To Work for Better Wheat.

The Southwestern Millers League has appointed a com'te to carry out the work authorized at the recent meeting of the League in Kansas City to induce farmers of the hard winter wheat section to grow a better quality of wheat. The com'te is composed of the following men:

Harry G. Randall, Kansas City; Chauncey Abbott, Jr., Omaha, Neb.; C. B. Warkentin, Newton, Kan.; K. E. Humphrey, El Reno, Okla.; E. R. Humphrey, Amarillo, Tex.; J. R. Forsyth, Denver, Colo.

The League has voted to spend about \$25,000 in conducting an advertising campaign to point out to farmers the result that will be gained in the careful selection of seed, the practice of the beet cultural methods, and improvement in the practices followed in harvesting, threshing and storing. State boards of agriculture, agricultural schools, and the agricultural dep'ts of railroads and industrial companies have signified their willingness to co-operate.

The Southwestern Wheat Improvement Ass'n has been organized by the League to give the railroads and other business interests representation.

The Kansas City Board of Trade is expected to aid the work. At the meeting May 9 of the Panhandle Grain Dealers Ass'n at Amarillo, Tex., a cash contribution of \$200 was voted to the S. W. Wheat Improvement Ass'n.

ORGANIZATION of the Sorghum Grain Growers Ass'n of Texas is contemplated by growers of grain sorghums in that state. A meeting probably will be held in Amarillo or Plainview early in May.

A GERMAN grain company with a capital of 50,000,000 marks has been founded by the Corn Products Refining Co., with branches in Berlin, Koeln and Frankfurt.

BONCAR

(Reg)

The Weevil Destroyer SAFE and SANE!

Write for literature and prices.

Weevil Dept.

HEIL CHEMICAL CO.

210 So. 4th Street St. Louis, Mo.

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GRAIN DRIERS CONDITIONERS

Moisture Testers and Accessories

DOCKAGE SIEVES and SCALES

EMERSON KICKERS

Grain Testing and Sampling Apparatus

Write for free booklet.

HESS WARMING & VENTILATING CO.

907 Tacoma Building
CHICAGO


Insurance Notes.

CHICAGO, ILL.—The Federation of Mutual Fire Ins. Companies meets here May 10.

REMOVE the cause before the fire and it won't be necessary to look for a cause after a fire.

INDIANAPOLIS, IND.—Lightning losses in this state last year were \$272,577, according to Newman T. Miller, state fire marshal.

THERE is a bearing somewhere in the elevator that gave you trouble all last year. You know where it is. Have you fixed it up yet?—*Our Paper.*

WILLINGNESS to issue open policies on grain cargoes on the Great Lakes up to \$600,000 per Class 1 steamer has been announced by the Atlantic Mutual.

INDIANAPOLIS, IND.—The hearing on insurance rates on fireproof buildings has been postponed until May 10 on account of the illness of Insurance Commissioner McMurray.

ABOLITION of the inspection and rating bureaus maintained by the fire insurance companies, and the taking over of inspection service and making of the rates by state authority is advocated by Insurance Sup't Travis of Kansas.

NEW YORK, N. Y.—The National Board of Fire Underwriters has just issued a new set of tentative regulations covering radio receiving installations, considerably modifying the regulations previously issued. Regulations governing sending stations also have been drawn up.

FIRE LOSSES in the United States and Canada during March were \$39,910,750, compared with about \$29,000,000 in February, and \$28,581,100 in March, 1921. The increase this year over last was 39%. During the first quarter of the year, fire losses established a new record, amounting to \$107,878,050, compared with \$89,789,900 for the same period last year and \$92,000,000 for the first quarter of 1920.

MINNEAPOLIS, MINN.—The General Inspection Co. has notified the terminal elevator operators here that they will be given a 10 per cent reduction in fire insurance rates if they will agree to eliminate certain existing hazards. The improvements requested include protection in unsprinklered areas, better water pressure in pressure tanks and removal of inefficiency in water supplies and electrical devices.

CHICAGO, ILL.—The imminent possibility of state insurance in Illinois was pointed out in a signed article which appeared recently. The evils of state insurance were explained, and the suggestion was made that insurance interests should immediately form an organization to combat such usurpation of the rights of private business. What the average politician knows about business is always in the zero column.

CANADIAN cigarette smokers now find this sermon in their packets of "fags": "Please do not throw away a lighted cigarette. See that it is dead out. Lighted tobacco and matches are especially destructive in forests. Living forests mean liberal employment; dead forests employ nobody. Don't be responsible for a dead forest." The same advice might be given to smokers in the United States, with reference to grain elevators and all other property as well as forests.

ST. PAUL, MINN.—The remaining balance in the insurance fund of the state of Minnesota, having been appropriated for reconstruction of the building at the Mankato State Teachers College which burned recently, more than \$40,000,000 worth of state property is said to be without insurance protection. The state insurance fund was created by the legislature in 1913, the act stipulating that the equivalent of the cost of insurance policies be set aside by the state treasurer. The amount in the fund has gradually dwindled since 1919, when the legislature of that year, together with those of subsequent years, ignored the necessity of the fund.

SCHEMES which would fasten a system of government insurance upon the country appear to be far from dead. An effort is now being made to create in the federal Treasury Dep't a Bureau of Farm Risk Insurance to provide insurance for farmers against the failure of crops. It is doubtful whether this was proposed to assist the farmers or the politicians who expect to be elected by the farmers. Insurance companies, with years of experience to guide them, have not been successful in their attempts to provide crop insurance. How, then, can the government, with absolutely no experience, hope to succeed in it? Of course, with a few millions of dollars to give away, the scheme would endure until the money had been expended.

THE Underwriters Grain Ass'n contemplates that, beginning with its new fiscal year in August, it will furnish coverage for both fire and dust explosion to those elevator owners who desire it in the terminal elevator field where the Ass'n operates. At the annual meeting of the Explosion Conference in New York May 5 it was decided to give the Grain Ass'n power dating back to May 5 to issue a combined fire and inherent explosion policy. The new step in the writing of grain elevators was the result of the recommendations made by the Subscribers' Actuarial Com'te of Chicago. A. G. Dugan of Dugan & Carr, Chicago, general agents of the Hartford, was at the meeting to advocate the step as was E. B. Hatch of Chicago, attorney of the Grain Ass'n.

WHEAT SCAB infected 18% of the Minnesota crop of 1919, it is estimated. Measures for control of this common disease are to avoid seeding wheat after corn unless the stalks are removed, to plow under all refuse and clear fence rows, to use seed of adapted varieties, and to sow wheat when the soil is cool.

EXPORTS of domestic and bonded grain from Montreal were heavier in 1921 than from any other Atlantic or Gulf port, being 139,453,890 bus. Exports from other important ports were as follows: Galveston, 94,173,049 bus.; New York, 84,698,681 bus.; New Orleans, 73,689,399 bus.; Baltimore, 55,314,808 bus.; Philadelphia, 46,769,286 bus.; Portland, Me., 13,859,040 bus.; Boston, 5,078,617 bus.; and Newport News, 485,118 bus.

Integrity Mutual Growing.

The insurance commissioners of all the states have accepted the report of the Integrity Mutual Casualty Co., with the single exception of Minnesota, where Insurance Commissioner Gustav Lundquist alleges the method of computing the reserves does not comply with the requirements of the state.

It is shown in the report that the company was incorporated in 1916 and since that date has reinsured the Ben Franklin Mutual Casualty of Chicago, Minnesota Employers' Mutual Liability of Minneapolis, Nebraska Manufacturers' Casualty of Omaha, and Oklahoma Employers' Mutual. The company started as the Millers' Mutual Casualty, but later changed its name. The president, J. C. Adderly, receives a salary of \$15,000 plus 5 per cent of the gross under-writing profit, but not to exceed \$15,000 additional.

Fighting Wheat Field Fires.

Wheat field fires when they extend to the entire acreage in the vicinity of towns depending upon the prosperity of the wheat growers for their business are actively combated by the merchants in Eastern Washington.

A typical organization is that at Colfax, Wash., where the businessmen have organized a volunteer fire department to aid the ranchers in saving their crop. The method used by the ranchers is the same as that employed by the earlier settlers in protecting their homes against prairie fires—a plowed strip ahead of the fire. Also a call for help is telephoned to town.

In town, a special signal is sounded on the fire whistle, and autos and volunteer fire fighters flock to the fire station. A pile of gunny sacks that is kept at the station, is soaked with a stream from the hose. The first auto to arrive is given a load of shovels and these wet sacks. Following autos are loaded with men, and they leave in rapid succession for the fire. Usually, by the time help from town arrives, the rancher and his neighbors have the plowed fire line completed and are ready for the men with the wet sacks. The sacks are used to beat out any small fires that start on the opposite side of the plowed strip.

Fire Barrels That Will Not Freeze at 55° Below Zero



Our 50 gallon Metal Fire Barrels will save you any worry. Complete with 3 buckets hung on hooks and submerged in anti-freeze solution ready for instant use.



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THE MILLER NON-FREEZING PUMP TYPE FIRE EXTINGUISHER

is constructed of heavy copper, brass and non-kinking hose and has withstood an unlimited test by the Underwriters' Laboratories, Inc., under the direction of the National Board of Fire Underwriters. The construction of this appliance must not be confused with the ordinary pump.

NON-FREEZING 40 BELOW ZERO

Throws a powerful continuous stream 45 feet and can be stopped and started at will. It is fool proof, simple to operate and is always in working condition. This pump has 10 quart capacity, giving a large reserve of powerful liquid and is easily recharged.

Miller Chemical Engine Co.

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CHICAGO, U. S. A.

THE MILL MUTUAL

Fire Insurance Companies have paid \$1,150,769.00 for Fire Loss caused directly by

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during the past twelve years.

NOT ONE LOSS has been reported on a building having APPROVED LIGHTNING PROTECTION.

The insurance saving on a flour mill or grain elevator makes the protection of the property a sound business proposition.

Spring and the season of Lightning Losses is here. Act today.

Ask for our Installation Specifications.

Mutual Fire Prevention Bureau
230 East Ohio Street Chicago, Illinois

Build to Get the Lowest Insurance Cost

If you are going to build, rebuild, or repair, give a thought to your insurance rate. A slight change in your plans may save you many dollars in the years to come.

The "Grain Dealers Mutual" is always at your service, as it has been for twenty years. Write or wire us at any time, and we will have a representative call.

C. R. McCOTTER
Western Manager
Omaha, Nebraska



C. A. McCOTTER
Secretary
Indianapolis, Ind.

FIRE EXPLOS ON WINDSTORM AUTOMOBILE

Western Grain Dealers Mutual Fire Insurance Company

DES MOINES, IOWA

J. A. KING, President Geo. A. WELLS, Secretary
A Legal Reserve Mutual Fire Insurance Company

Tri-State Mutual Grain Dealers' Fire Insurance Company

LUVERNE, MINN.

Average return for 20 years, 50% of the Deposit Premium.
Provisional and Short Term Grain Insurance.

We write Tornado Insurance.

E. H. Moreland, Secretary



Help to Shackle Fire

FIRE loss still continues to climb. Much of this loss has been unnecessary—it could have been prevented.

As a mill and elevator owner, you know the vital importance of being fully protected against fire loss.

Hartford Mill and Elevator Underwriters and Engineers

offer you a two-fold service against loss by fire. Competent and experienced fire prevention engineers are at your command to inspect your property and point out the possible fire hazards. A system of inspection at regular intervals will be established if it is your desire.

These experts help to shackle fire in your mill and elevator.

In addition to this personal service you can obtain fire insurance in the Hartford Fire Insurance Co., which guarantees sound indemnity should fire loss be incurred despite all precaution.

Even if you are not a Hartford policyholder, you should familiarize yourself with this two-fold Hartford service—and how it will prevent loss of your property. Simply address a request to the

Hartford Fire Insurance Co.

Mill and Elevator Dept.

H. W. DONNAN, Supt.

39 So. La Salle
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CHICAGO,
ILL.

A SEAL OF



CERTAINTY.

Elevator Etiquette and Fashion Notes.

BY MISS E. FISHANCY.

BANDS of tough steel are the holding braces that lie buried in the walls of massive grain tanks.

HIGH driveways which formerly were seen so frequently, seem to have gone the way of hoop skirts.

ELEVATOR buckets with low cut fronts are now firmly established as accessories of the well dressed plant.

ROOMY, well lighted concrete basements are fashionable with all but the members of the rat, mice and weevil families.

LIGHT COLORS are approved for the interior of elevator offices. This may be due to the fact that light begets cheerfulness.

IT IS NOT considered evidence of good breeding for the elevator to incline its head toward the one side or the other. It must be plumb.

METAL HEADWEAR for men passed out of vogue when the armistice was signed in 1918, but it is still looked upon with favor for all elevator legs.

VEILS of wire netting are good form for the openings in elevator legs. Like many other styles, they conceal little, yet they offer full protection to passersby.

THE VERY LATEST in collars are those that fit the shaft closely, having their set screws sunken so that no projecting part may endanger workmen in the plant.

THERE IS NOTHING more effective for preventing the wrinkles of hard usage in elevator bearings than a daily application of cold cream in the form of a good lubricant.

THE MIND whose currents of thought are ever under careful control, like the elevator with an efficient dust collecting system, will not flare up and explode at insignificant flashes that may occur.

FRINGES are being used extensively on ladies' wear for spring; but on the edge of a conveyor or elevator belt they indicate objectionable rubbing at some place along its line of travel.

LIGHTNING RODS are very much in vogue, not alone because of their ornamental features but more for their practical worth. For one thing, they keep the house from flirting with Red Lightning.

RUSSIAN BOOTS of patent and various colored leathers are a passing fancy. Of course they must be kept well cleaned to present a neat appearance and to perform the service for which they were intended.

FLAPPERS are attracting so much attention on the streets that some of them make the front pages of the newspapers almost daily. In the elevator most of the flapping is done by loose sheets of metal siding and roofing.

ALTHO much is said against the practice of the girls using so much rouge, still it must be admitted that just the right amount of paint, properly applied, gives protection against the ravages of time, even to an elevator.

SOME of the exclusive shops are showing a line of men's belts having improved buckles that serve to make it easy for the wearer to keep them always properly tightened. An automatic take up on the elevator belts gives the same results.

MANUFACTURERS and dealers insist that, if there is a tendency on the part of the ladies to discontinue the use of stays it will soon pass over; and in the meantime the elevator that is not properly stayed may scatter its contents over the adjacent landscape. Watch your steps.

CY KLONE has been seen a few times this spring. At the moment this is written, he has not visited many elevators, but of course he may come any day. All of the best families have long since ceased to worry about his coming, and make themselves as secure as possible by a tornado insurance policy.

Now that trucks are taking the place of horses and mules for hauling grain, the elevator man's vanity bag should be supplied with some baling wire and skid chain or two to supplement the buckles, snaps and extra straps that were occasionally required by his customers of a few years ago.

MISS ELLA VATOR gives but little thought to her new Easter bonnet, because Sunday is her day of rest and she would get no enjoyment out of the parade of that day. A little later in the season, say about the first of June, she makes up for any pleasure she may have lost by outfitting herself with a new complement of buckets, belts, boots, cleaners and all the other necessary items of her wardrobe.

Government Railroad of France Losing Money.

Premier Briand of France proposes to sell the Government railroads to stop the drain upon the Government revenues. The rates are high and the service miserable, yet the Government in 18 years' operation has lost in the operation of 6,000 miles of road the vast sum of 5,000,000,000 francs.

The French railways comprise six great lines, one of which, the Western system, the longest in France, operating 6,212 miles of railway, has been owned by the government. The five other railways are privately owned and operated.

No fairer or more thorough experiment in government railroading has been made than the one carried out on the Western system in France. Nearly twenty years ago this system was consolidated with the Ancient Réseau, or Old Lines, which serve Paris as a sort of interurban railroad.

Before 1904 the Old Lines had been prosperous. But within four years after the Western railway had been taken over by the government a deficit was shown. The balance has been on the wrong side of the ledger ever since, although the railways under private operation earned profits up to the beginning of the war.

In 1921 the first full year under normal operating conditions after the war, the loss on the state railways is estimated at 100,000,000 francs, and this without interest on the investment, in spite of the poorer service and fewer trains as compared with the pre-war schedules.

T. C. HUSSEY, of the Advance Mill & Elevator Co., Carrollton, Ill., has been continuously engaged in the grain business for 55 years.

THE AMERICAN Malt & Grain Co. has declared the third liquidation dividend of \$12.

Books Received

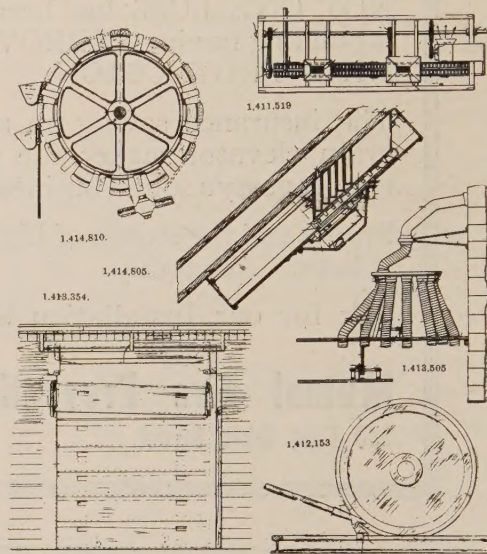
EMPLOYERS' ASSN'S IN THE UNITED STATES, is an impartial description of the organizations of employers to resist unionism in the metal trades, the building industry and the printing industry; their important activities and history, by Clarence E. Bonnett, professor of economics, Tulane University of Louisiana. Cloth, 594 pages, including 34 pages of valuable index. The Macmillan Co., New York.

STORED GRAIN PESTS is a compilation into one pamphlet of descriptions of all the insects infesting stored grain, 39 in number, with numerous engravings to aid in their identification, especially useful to grain inspectors. For the purposes of the grain standards act the authors suggest that the lesser grain borer, tho strictly not a weevil, might well be called a grain weevil. The saw-toothed grain beetle, found abundantly in Northwestern wheat last year, is not classed by the authors as one of the harmful "weevils." Bulletin 1260, U. S. Dept. of Agriculture, by E. A. Back, entomologist, and R. T. Cotton, assistant entomologist, 37 pages; Washington, D. C.

Patents Granted

1,414,810. **Bucket Elevator.** Wm. W. Hudson, Toronto, Canada. Sheaves in the rim of a head wheel carry a cable on which the buckets are hung, their passage over the wheel being guided, however, by brackets projecting outwardly from the opposite side edges of the rim.

1,414,805. **Automatic Sampler.** Seward E. Cogswell, Central City, Neb. The spout or other casing has doors at opposite ends for the insertion and removal of a tray, latch levers being mounted within the casing and operated by bars



extending thru the bottom of the casing. The outer terminals of the bars are inclosed in a hood locked to the casing.

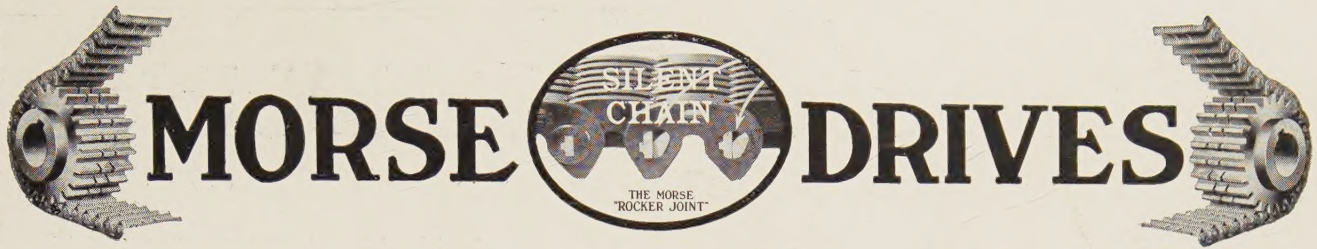
1,411,519. **Process and Apparatus for Separating and Polishing Seeds.** William A. Rice, Jerseyville, Ill. Mucilaginous and nonmucilaginous seeds are mixed and agitated, at the same time being moistened to a limited degree. Sawdust is then mixed with the seeds and the agitation is continued until the nonmucilaginous seeds are fully dried by attrition and absorption only. Finally, the fully dried seeds and the sawdust are separated by being discharged into a blast of air.

1,413,354. **Grain Car for Railway Doors.** Edward Posson, assignor of one-half to Frederick C. Maegly, both of Chicago, Ill. On the wall of a railway car, grooved guideways are placed along the vertical edges of the door opening. Door sections have end portions engaging in the guideways. Means are associated with the door sections and the guideways for putting the sections under tension between their ends when tilted to limiting positions in the plane of the door opening.

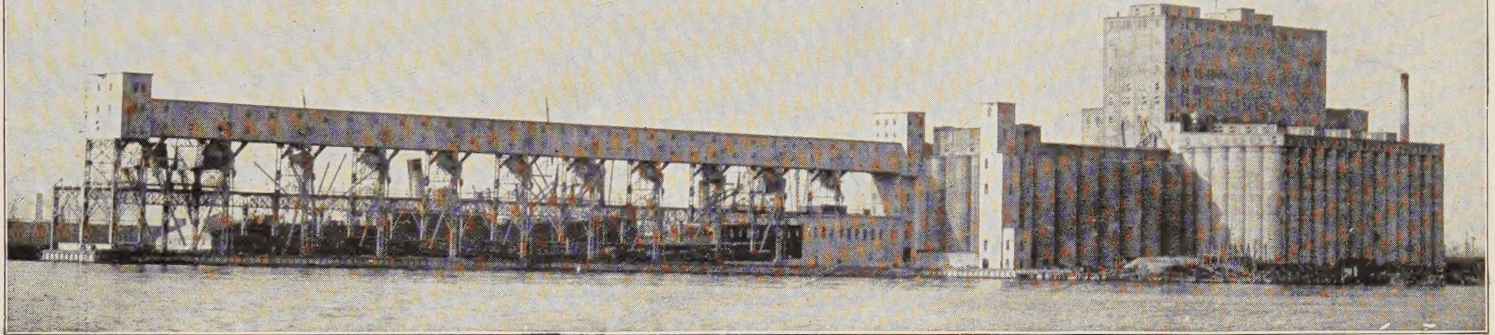
1,412,153. **Car Mover.** Olof Westling, Minneapolis, Minn. A bracket has a base portion with a flat surface for engaging the top surface of the rail. An upwardly and rearwardly inclined lug rises from the base portion and has a pivot opening disposed rearwardly of the base portion. A flange extends vertically downward from the base portion on the side of the rail and has a projection adapted to extend under the rail head. A lever extends from the base portion, and has a socket for receiving the handle.

1,413,505. **Grain Distributing Device for Elevators.** Samuel P. Stump, Morrison, Ill. A distributing head has a series of openings arranged in circular form in the bottom. A plate having a single opening is adapted for registration with any of the openings in the distributing head; the center of the plate being in axial alignment with the center of the circle defined by the series of openings in the bottom of the distributing head. A flexible spout is in communication with the opening in the plate.

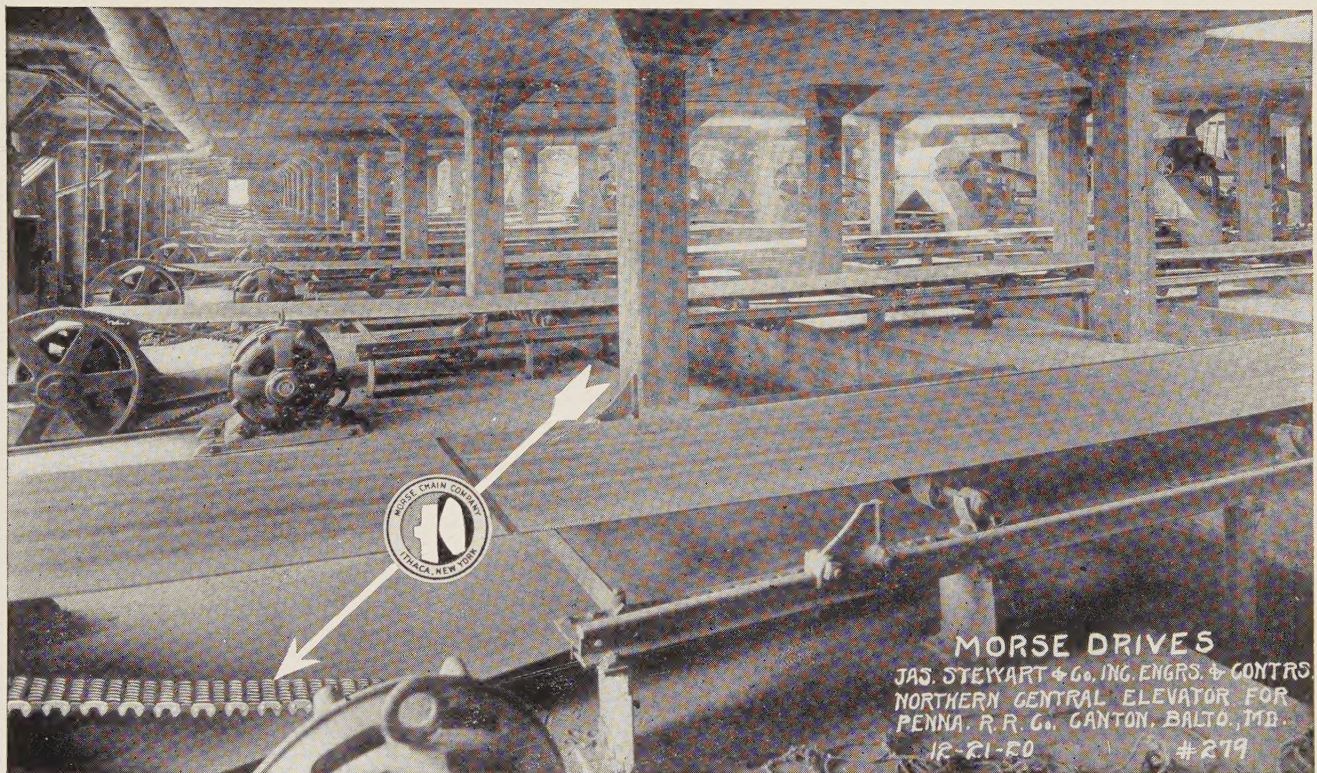
The GRAIN DEALERS JOURNAL.



Northern Central Elevator at Baltimore



This Elevator Can Load Five Ocean Steamships of Average Size Simultaneously



MORSE DRIVES
JAS. STEWART & CO. INC. ENGRS. & CONTRS.
NORTHERN CENTRAL ELEVATOR FOR
PENNA. R. R. CO. CANTON, BALTO., MD.
1R-21-FO #279

Morse Silent Chain Driving Conveyor Belts Above Storage Bins of Annex No. 1, Northern Central Elevator

This is one of many large terminal elevators equipped thruout with Morse Chain Drives.

MORSE CHAIN CO., ITHACA, N. Y.

Write for Booklet—Address Nearest Office



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BALTIMORE, MD., 1402 Lexington Bldg.
BOSTON, MASS., 141 Milk St.
CHARLOTTE, N. C., 404 Commercial Bank Bldg.
CHICAGO, ILL., Merchants L. & T. Bldg.
CLEVELAND, OHIO, Engineers Bldg.
DETROIT, MICH., 1361 Abbott St.
KANSAS CITY, MO., Finance Bldg., Morse Eng. Co.
NEW YORK CITY, 30 Church St.
MINNEAPOLIS, MINN., So. 3rd St., Strong-Scott Mfg. Co.

MONTREAL, St. Nicholas Bldg., Jones & Glassco Reg'd
PHILADELPHIA, PA., Fuller Bldg.
PITTSBURGH, PA., Westinghouse Bldg.
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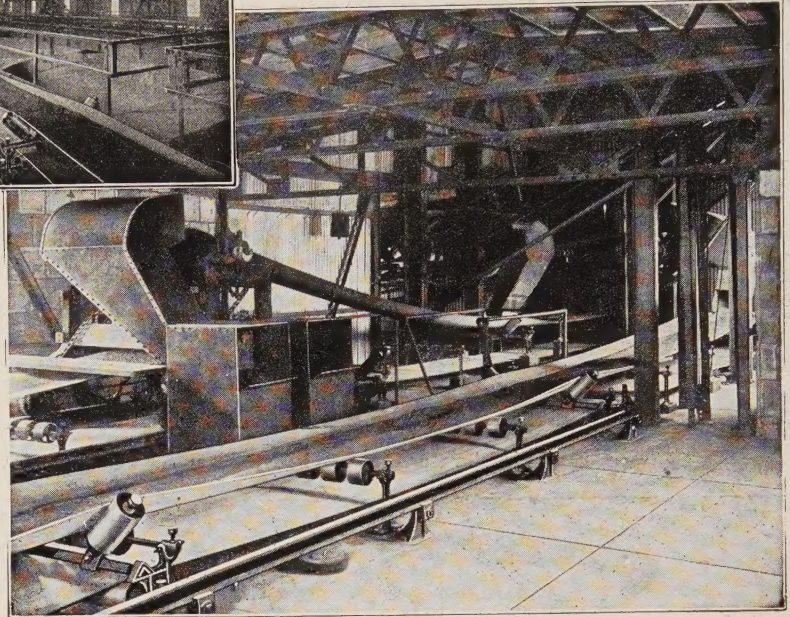
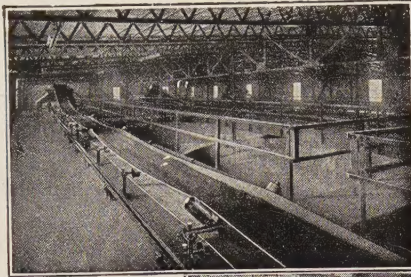




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MAINTENANCE
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Weller made machinery is made by men who know its application and the conditions under which it is to operate. It proves its merit because quality is built into it.



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Your investment in grain handling equipment will pay dividends in proportion only to the service it gives so whether you have a large or small elevator you will save money by specifying for machinery that will last longest under the most severe conditions. Frequent shut downs and waiting for repairs dissipate your profits--Make yours pay--Install

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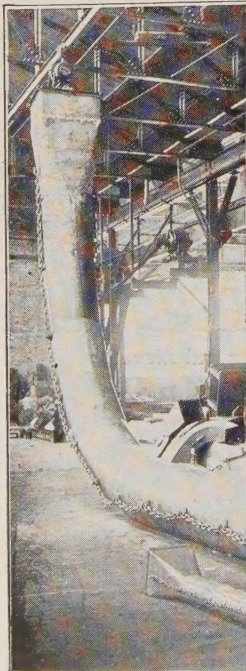
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